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- FLOPPY DRIVES
- HARD DRIVES

**WHAT YOU NEED!  
WHAT TO PAY FOR IT!**

**INSIDE:**  
OVER 50 SOFTWARE AND  
HARDWARE PRODUCTS  
FOR YOUR AMIGA



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2 DISKS: DPaint 5 EXCLUSIVE DEMO • DRAGONSTONE & MORE



**ON CU AMIGA'S  
OVERDISKS  
THIS MONTH...**

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# AMIGA

THE ESSENTIAL AMIGA MONTHLY

## OVERDISK 92

### PAINT 5

by Electronic Arts

Requires a minimum of 1Mb RAM and Workbench 2.04 or higher. Eight years Deluxe Paint has been the standard against which graphics and art packages have been measured. This month we bring you the well known, instantly recognisable DPaint 5, loaded with a load of new features.

### REAL TIME EFFECTS GENERATOR

Requires a minimum of 1Mb RAM, and a Sound Sampler cartridge. If music fails, the Real Time Effects Generator will allow you to create a multitude of effects from sampled sounds and instruments.

### RANDOM DOT STEREOGRAM MAKER

Requires a gas

in pictures and make funny, spidgy stereograms out of them. Right now, we still haven't been able to see anything in them! Try it for yourself. Good luck!

### CHOON OF THE MONTH

All Amigas

Coverdisk Choon's competition has been a major success. Some have been good, others not so hot - here's one of the best.

## OVERDISK 93

### DRAGONSTONE

by Core Design

Requires a minimum of 1Mb RAM

Dragonstone is a classic arcade game in the style of the original Dragon's Lair. It gives you nearly all the action and excitement of the original.

## GAMES:

RUFF 'N' TUMBLE  
LITIL DIVIL  
DETROIT  
JUNGLE STRIKE  
TFX  
FIFA SOCCER  
CYBERWAR  
AND MUCH MORE ...

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INSIDE  
OVER 50  
HARDWARE  
FOR YOU



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LITIL DIVIL

DETROIT

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 60 JULY-DECEMBER 1993

## GET SERIOUS

## 26 EVERYTHING YOU EVER WANTED TO KNOW ABOUT STORAGE DEVICES

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Left: No number  
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Right: How realistic  
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# SCREEN SCENE

## GAME REVIEWS GAME REVIEWS GAME REVIEWS GAME REVIEWS GAME REVIEWS

We reach the merry month of October, and a veritable cornucopia of top game reviews and previews. We've got the full details on the Ocean/EA lie in, Renegade's coking *Ruff 'N' Tumble*, the unbelievable *Detrol* from Impressions and, believe it or not, a review of US Gold's *World Cup 94*! Read on, weary travelers.

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### 54 OCEAN—ITS DEEP MAN!

The full story on the big one's Christmas titles, including *TFX* and *Mighty Max PLUS*, the tie-up of the year, Ocean's Electronic Arts licenses including *Jungle Strike* and *Snap FU*.

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Another cute platform game? Sadly, this one isn't as good as some other efforts, as Tony Dillon soon finds.

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3D combat extravaganza this month, with the sequel to one of last year's best strategy titles.

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Level two of this enormous adventure is yours for the asking this month, as Lisa Tunnah takes you through her top-selling game.

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### 86 HELPLINE

The world's greatest interactive tips service returns for another month, with more aid than the Salvation Army, so start writing now.



*Jungle Strike*—Play those Jaws! Y'all really do in that one, nup, nup? Seen any Colombian drug barons 'round here?\*

# REGULARS

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See panel opposite.

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Andy Lemming gets in a state about packaging. Pien brown wrapper, a glossy box of delights—you decide.

# COVERDISKS

## DISK 92 PAGE 8



Our Deluxe Paint 5 exclusive usable demo tops the bill. Then there's *The Realtime Effects Generator*, a *Random Dot Stereogram*.

makes and our first Choice of the Month Best (that).

## DISK 93 PAGE 13



Core Design may have just created the adventure that everyone has been waiting for and we're giving you a massive taste of it. Fossil.

your eyes on this Zedra meets The Chaos Engine style and try out the complete full level of *Dragonstone* and see for yourself how good it really is.

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# COVERDISK 92

## DELUXE PAINT 5

Is Deluxe Paint still the Amiga's top graphics and animation system? Find out for yourself with our exclusive Deluxe Paint Version 5 demo!

### THE ICON STRIP

For those unfamiliar with *Deluxe Paint*, here's a quick run-down of the functions available from the icon strip. All functions are selected with a single click of the left mouse button, unless otherwise stated.

### DOTTED DRAW

Suitable for drawing with larger brushes, otherwise lines appear to be broken.

### LINE DRAW

This draws straight lines. Holding the left button sets the start point, releasing it sets the end point.

### FILL

Fills the selected area with the current colour, or the pattern defined in the Fill Type box.

### RECTANGLE

Draws filled and outlined rectangles. Click the top left corner for outline, bottom right for filled.

### ELLIPSE

Click once on the page to set the centre, then pull out to the desired size and shape. Click again to draw, or hold the left button and drag the mouse to rotate the ellipse.

### CUT OUT BRUSH

Cut out sections of the screen with this tool. Click once, and you can drag out a rectangular area, which will become the active brush. Click twice and you can mark out an irregular shape using the connected line technique.

### GRID MODE

Locks the pointer movement to a grid. Right mouse button brings up the grid options.



### BRUSHES

Choose your 'pen tip' from this small selection. For a bigger brush, click one of them with the right mouse button, and drag it out to the required size by holding down the left mouse button.

### CONNECTED DRAW

Suitable for smaller brushes, can be too slow for use with larger brushes.

### CURVE

Works like the line functions, but draws curves. A second mouse click sets the apex of the curve.

### AIRBRUSH

Draws with an airbrush effect. Set the section on Airbrush for details on the new airbrush options.

### CIRCLE

Works the same as the rectangle tool.

### CONNECTED LINE

Works like the line function, but the end point of the line becomes the start point for the next. Click the top left corner for unfilled lines, bottom right for filled. Spacebar finishes the current line sequence.

### TEXT

Allows you to type text directly onto the screen. Drag the cursor with the mouse. Right mouse button brings up the font selector.

### SYMMETRY

Duplicates pen movements around a central point. Right mouse button brings up the options.

### ZOOM

Alters the zoom factor of the magnify window. Left button zooms in, right button zooms out.

### NEW FEATURES

Here's a list of the new features in *Deluxe Paint 5*...

- Alpha Mouse
- 24-bit true colour
- Multiple palette animations
- Variable frame rate animations
- Textures for realistic drawing
- Scrolling and moving backgrounds
- Gradient fill/overlay
- Soft edge oil brush
- Larger line screen animations
- More requester subwindows

### GENERAL USE

*Deluxe Paint 5* is a paint and animation program - you can use it to create static pictures and moving animations. To draw on the screen, hold down the left mouse button and move the mouse. To select a different drawing mode, use the icon strip on the right of the screen. To change the pen colour, click a new one from the palette below the icon strip. Areas of the page can be erased by holding the right mouse button whilst drawing. All menu functions are selected in the normal way with the right mouse button. What follows is a guide to some of the key new features.

### TEXTURES

To simulate real world drawing materials more realistically, *DPaint 5* allows the use of different 'textures'. These give the impression of drawing onto surfaces such as canvases, stone, marble, etc.

To use a texture, select Texture -> Load from the Edit menu. A file requester will appear with four available textures. Double click on any one of them. Now when you draw on the page, instead of laying down solid colour, you get a subtle shaded pattern showing through.



## TAKE NOTE

This demo version of DPaint 5 has a few limitations, as follows: low-resolution screen modes only, a maximum of 64 colours, a maximum 25 frames per animation, and no saving of images, animations or soundings. All of the other features are in full working order.

Select a larger brush to see the effect more clearly.

To switch back to normal drawing mode, select Texture -> On/Off from the Eff menu. Try another texture by selecting Texture -> Load from the Eff menu once again. These texture files are actually IFF brushes. This makes it very easy for you to create your own textures. Any part of a page can be cut out as a brush, and saved into the Textures directory on the DPaint 5 disk, and then loaded back in and used as a texture. If you have any other IFF brush files, try loading those in for some interesting effects.

## MOUSE TRACK

When using large brushes, a lot of colours or high resolution screens, most paint programs find it hard to match the on-screen pen movements to the mouse movements, where curves are often reduced to straight lines.

DPaint 5 has a neat option to avoid this. It's called Mouse Track. When this is turned on, it makes reading the mouse position a priority and puts the actual drawing on a slightly delayed screen update, but a more accurate representation of the mouse movements. You can turn Mouse Tracking on and off by selecting Mouse Track from thePrefs menu.

## CAMERA MOVE

The Move requester has long been one of DPaint's most powerful

Just look at the fantastic blaze of colour that can be achieved with DPaint 5.

The Camera Move function uses the screen from the spare page. Draw a background on your main page, and then select Spare -> Copy to Spare from the Pic menu (or press CTRL-J). This copies the screen over to the spare page. Now you need to set up some animation frames. Select Frames -> Set # from the Anim menu. Enter 25 in the box, or a smaller number if you're low on memory.

Select Camera Move from the Anim menu (or press Shift-N). The three boxes at the top are the main controls. These set the amount of movement in the X, Y and Z axes.

For example, if you wanted the background to move 100 pixels to the left, you would enter 100 in the X

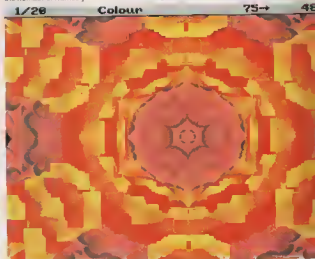
X			Y			Z		
Dist:	200		140		1100			Can
Zero <input checked="" type="checkbox"/> Cycle <input type="checkbox"/>								
Slow In:	5		Move	<input type="checkbox"/> <input checked="" type="checkbox"/>				<input checked="" type="checkbox"/> Wrap
Slow Out:	5			<input type="checkbox"/> <input checked="" type="checkbox"/>				
Count:	25							
Start			End			Adjust		
Preview			New			Before		
Exit			Load			Save		
						Cancel		

One of DPaint 5's most powerful new features for animating is the Camera Move requester, which allows for scrolling backdrops and camera pan effects.

animation facilities, but it can only deal with brushes. The addition of the new Camera Move requester allows you to perform similar functions on the background, such as horizontal and vertical scrolling, and you can also zoom in and out

box. If you wanted it to move right, you would enter -100. Simultaneous X, Y and Z moves are possible. It

you want the animation to get up to speed over the last few frames, enter the number of frames you want to



You need to be a conventional artist to get excellent results from DPaint 5. Set up a few colour gradients and some symmetry, and images like these are no mean feat to knock up.

use as the "ease in" period into the Slow in box. Likewise, if you want it to slow down towards the end, enter a few frames in the Slow Out box. Try entering five in both of these boxes. If you want the background to wrap around, make sure the Wrap button is ticked.

Instead of moving the background from its original position, to the new position indicated by the X, Y and Z values, you can have the background move in from the X, Y and Z values,

into its original position. To do this, click the ->0 button on the Camera Move requester. Before you commit yourself to rendering the animation, you can try and get an idea of what it will look like with the Preview button. When you're happy with it, click on New. You can then use the animation controls to play back the results (see the flap on the cover of this magazine for animation and other hotkeys).

## NEW AIRBRUSH

You now get a new type of airbrush to play with. Click the airbrush icon with the right mouse button to bring up the options. Click the Standard button to select the new airbrush mode. You can alter the size of the spray, and the rate of the paint flow with the sliders. Click OK to get back to the page. You'll find that you need to move the mouse a lot slower when using this airbrush, as a lot of calculations need to be calculated, which takes time.

## TRANSLUCENCY

This lets you paint with a translucent brush. The colour, or colours of your brush, are mixed with those of the image beneath. You can set the level

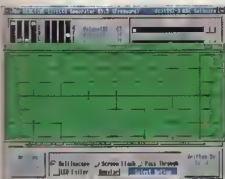
of translucency by selecting Translucency -> Settings from the Eff menu (or by pressing CTRL-I).

## THAT'S ALL FOLKS!

Unfortunately that's all we have room for here. DPaint 5 is such a friendly program that you should be able to figure out the rest for yourself. For a guide to some of the main keyboard shortcuts, see the flap on the cover of this incredible issue of CU AMIGA.



# THE REALTIME EFFECTS GENERATOR 1.5



You won't find a more comprehensive real-time sound processor than TREG. Whether you want serious, quality effects for making music, or you just want to mess around with the robot noises, you can't go wrong with its fool-proof interface.

The Realtime Effects Generator (TREG) is not only very useful, but stacks of fun too. It turns your Amiga into a versatile effects box, capable of processing any sound via a sampler cartridge. For example, you could plug a microphone into your sampler, turn on the echo effect, and be instantly immersed into a booming raggy MC. Then again, you could put a drum beat through the sampler, and select the phaser option, adding a kind of up-and-down-woolly effect to the snares and high hats. If that doesn't inspire you I fancy, how about picking out one of the voice changing effects, like dalek or exterminator? There are 19 effects to choose from, many of which can be adjusted to suit your requirements.

## WHAT YOU'LL NEED

1. Virtually any 8-bit sound sampler cartridge such as Megaloud, Mastersound, Techtosound Turbo, or Audio Master.
  2. A sound source, such as a CD player, tape deck, record player or musical instrument.
  3. A connecting lead from the output of your sound source to the input of your sampler. If you're using your voice as a sound source, you'll need a microphone.
- HOW IT WORKS**
- It couldn't be much simpler. Once you've connected up your

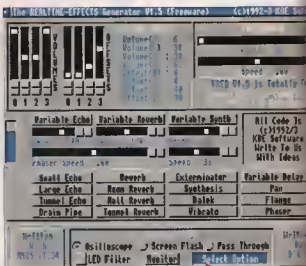
sampler and sound source, you should check that the sound is coming through loud and clear. Click the monitor button from the bottom panel. Make some noise from your sound source, and adjust the volume so that the wave just touches the top and bottom of the oscilloscope. If you get to sound coming through, and

there's no wave in the oscilloscope check your connections.

Press the left mouse button to get back to the main screen. Now select any of the effects from the main panel, and play your sound source. You should hear the source sound coming through, processed by the effect you chose. Click the left button to exit the effect, and try another. Some effects are better suited to certain sounds than others. Effects such as flange and phaser are most noticeable on the high frequencies of sounds, so it's best to turn the full-range filter off when using these (click the LED Filter button). The echoes can generate a bit of hiss, so it's best to keep the filter on for these.

The variable effects give the program even more flexibility. Use the sliders to alter the parameters. Echoes often make drum beats sound jumbled and out of time, but with the variable echo, you should be able to get it repeating at time with the tempo of your song.

TREG uses all four of the Amiga's sound channels, so you can't run it simultaneously with OohMed or ProTracker on the same computer. However, if you can get hold of a second Amiga, you play your modules on one, and pass one or both of the sound channels through TREG running on the second Amiga.



Look at all these lovely effects! You could spend hours just trying them all out!

## RANDOM DOT STEREOGRAM MAKER

RDS creates 3D pictures from 2D RTT files. It does this by 'randomising' the pixels to a picture, and rearranging them so that suitable parts of the picture appear in front of others. In order to see the effect, you need to stare 'through' the randomised picture, focusing your eyes on a point behind the actual image. One way to do this is to put your gaze on a reflection in the screen. We were told it would work, however, we've all strained our eyes trying to spot anything. So it anyone else there were something please write in and tell us.

## USING RDS

RDS 1.1 can only be used from CLI or SHELL. Refer to the instructions on page 55 to install it on your hard drive or Workbench disk. It works best with non-AGA low resolution pictures. Save each a picture in your copy of Workbench, or somewhere on your hard drive, then follow these steps.

1. Load from your copy of Workbench on your hard drive.
2. Open a SHELL window.
3. Type: RDS path\filename
4. The path\filename above should be replaced by the path and filename of your image. So if you saved a picture file called pic into the main directory on a copy of Workbench, you'd replace it with: RDS pic.
5. A 2D version of the image will be saved into the same directory as the source image, with the same filename apart from a .RDS extension. Use any picture viewer or paint program (such as Paintbox) to view the picture.
6. To convert above picture back to normal, use the UNRDS command.

## CHOON OF THE MONTH

Thanks to all who have sent in entries for Choon of the Month. This month's choon is from Jose FCO Arnez Jerez of Valencia, Spain. The track Amiga Power was chosen for its energy and ideas (and because it was small enough to fit on our disk with the rest of the program).

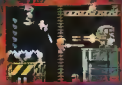
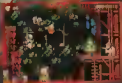
A registry prize is on its way. Sorry that our stringent computer and technique are preferred, and that you've been to be chosen. Smaller choons have a better chance of making it to the overlink (especially no larger than 250k, preferably much smaller). Send your entries to: Tony Horgan, Coverdisk Choon, CU AMIGA, 30-32 Partridge Lane, London EC9R 3AU, England, UK.



"Brilliant ... the apex  
of platform pleasure."

The One 91%

# Ruff 'N' Tumble



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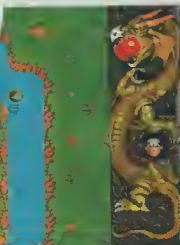




# COVERDISK 93

Once again we've managed to surpass ourselves in our games coverdisks. If you loved *Zelda* then you'll adore our coverdisk demo of *Dragonstone*.

## DRAGONSTONE



Enjoy yourself with this month's spectacular CU AMIGA coverdisk.

If there is one question that *Amiga* gamers have asked time and time again, it's "When is *Zelda* coming to the Amiga?" This mighty popular top-down view adventure has been regarded as a classic on its native Nintendo formats since conception, and it has always seemed strange that a similar game had never been released for the Amiga.

Well, now it has, because Core Design's *Dragonstone* (originally titled *Dark Stone* and billed as the sequel to *Darkmare*) could be described as *Zelda* meets *The Chaos Engine*. It's the tale of a single young man, who has a mighty quest to free his homeland and destroy a dragon. Obviously this tale is padded out with stories of wise old crones and mystical visions in the middle of the night.

### FLIMPEY' HUGE

Our demo is the whole of the first level of the game, and that's huge as you'll soon find out. We won't tell you what you actually have to do as you aim changes throughout the level.

What we will do, however, is take you through the trial part of the level to give you some ideas of how the game plays. From where you start, stab the fire button a couple of times to swing your sword. Now hold down the fire button and watch the red bar on the right of the screen to see the sword power up. When it reaches the top of the bar and starts flashing, release the fire button to see a fireball fly from the end of your scimitar. Now press the space bar to enter the Control Panel (see panel on right), and then return to the main game when you've experimented enough.

Now you know all the controls for the game: you can start to solve your first puzzle. From your starting position, head right until you can go up, and then go left and up as soon as possible. In no time at all you should reach a house. Walk through the door and talk to the old woman sitting in the pot. She'll tell you that she needs a herb, which can be found near water. Leave the house and head far the lives to the right.

### VEGETATION CHAOS

Now walk along the bank of the river killing the plants that open up and fire

### THE CONTROL PANEL

Pressing the space bar brings up this menu screen, which lets control all the other things your character is capable of apart from fighting. This is where the adventure element of the game comes into play.

#### Your Inventory

This row of boxes shows you all the items you are carrying. Just move the highlight to select the item you want to look at or use.

#### Your Current Location

This window will always show you where you are standing. It can be highlighted when you are in examine mode to give a descriptive account of your surroundings, which can give a lot of clues as to what to do next.



#### Use Mode

Selecting this will prompt you to select an item to use. Pushing up will select the Current Location window, and pulling down will move the pointer to the inventory. Select what you want to use, and a message will come up to tell you exactly what has happened as a result of your choice.

#### Exit

Click on this to return to the main game.

#### Examine Mode

Sometimes words aren't enough, or so someone said. In this game, it's the other way around. If you are sick of looking at a graphic of an object and would like to know more, then select this, and the item you want to look at.

#### Talk Mode

Click on this when you are standing near a person and you'll have a conversation with them.

at you. One will drop a leaf, which is the herb you need. Walk over it to pick it up, and head back to the house. Once there, stand next to the old woman and talk to her. She'll take the herb and give you a bottle of poison and a scroll in return. Now all

you need to do is work out what to do with the scroll. Hint: Examine the standing stones to the bottom left of the map.

Now you're on your way! Enjoy, and watch out for a full review next issue.



# Software that matches your Hardware



## Programming

### HiSoft BASIC 2 £79.95

HiSoft BASIC 2 is the new BASIC system for your Amiga, fully compatible with all Amigas from a Workbench 1.3 A560 up to an A4000 tower system running Workbench 3.

This exciting package sets new standards for BASIC programming on the Amiga with full AGA and Workbench 3 support through the use of extensive and complete libraries.

This is the system for those who want to program real applications and utilities on their computer - a professional BASIC interactive compiler with an easy-to-use, multi-window editor and read-in level debugger producing super-fast, compact code in memory (see testing) by direct to disk.



The HiSoft BASIC 2 package runs on all Amigas with 7Mb of memory or more and includes an extensive, 645-page user manual with tutorials, many examples and a complete reference section.

Upgrades are available from HiSoft BASIC version 1 and Power BASIC - please call for details.

**Get the Amiga BASIC of the 90s today!**



## Utilities



### Maxon Magic

The Maxon Magic screen writer works on all monitors, even with graphic cards, and offers you a choice of 20 different drawing and smoothing methods such as Antialiasing, Flying Brickwall, Floozies, Crazy Worms, Mammals, Clock etc.

This is the utility that you simply must own! Maxon Magic is a fantastic combination of 20 different minimised screen savers, a system error recovery manager and many amazing screen effects that will not only be incredibly useful but will give you and your friends endless enjoyment as well.

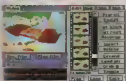
If that isn't enough reason for many, Maxon Magic also lets you assign handy keyboard shortcuts to tasks such as Window/Screen open or close, Move, Copy, Paste, Mouse click, Scroll up and more. Choose from 100 sounds provided as background music or even your own sampled 16-bit sound sampler such as



**Only £29.95**



## Video/Music



The best-value real-time video digitiser you can buy, Videomaster gives you the ability to record real time monochrome video with sound at 25 frames per second as well as quality full-screen stills from your camcorder or video recorder - Videomaster RGB includes our new video splitter, ColourMaster, and produces amazing quality colour stills.

Videomaster AGA works on the A1200 and A800, connects via the PCMCIA slot for extra speed and functions to use other peripherals, allows high quality stereo sound and supports HiAM6 and HiAM8 up to 640 x 512 resolution for stills.



Clarity15 is our premier sound sampler allowing rates up to 32KHz in 16 bit stereo and up to 48KHz at 16 bit mono on an A500, accelerated machines can handle faster sampling rates. The software provides extensive features including full edit control, a MIDI keyboard emulator, a sample sequencer, many special effects and FFT analysis. Version 1.5 has an up-to-date Workbench 3 look, its own window and is fully compatible with faster Amigas.



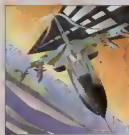
Megascound is the new 8-bit, stereo, direct to disk sample package, the software is packed full of easy-to-use editing features, special effects and even as much as the ability to print waveforms and sample information. The package allows sampling up to 84KHz stereo and 56KHz stereo to memory and up to 21KHz stereo to hard disk on an A1200. Supplied with a hardware volume control and an extensive 144-page manual, Megascound is impressive value at only £34.95.



ColourMaster is a new electronic colouriser which works in conjunction with Videomaster for stunning colour stills.



## Simulation



### ProFlight

The classic Tornado simulator that works on all Amiga computers and provides maximum realism while being tremendous fun to play.

ProFlight is one of the most accurate, and therefore most flyable, aircraft simulators currently available for home computers - everything is there from the correct effect of the tailfins, elevators and rudder through complete navigational aids with auto-pilot up to sophisticated weapons such as Sidewinder missiles and fly-to-line bombs. The accuracy of flight is top-notch, try this test with your other favourite simulator - turn the aircraft on its wing tips, most will continue to fly straight and level, the ProFlight Tornado will lose altitude, just like the real thing.

ProFlight comes complete with a professional ring-bound, 180-page flight manual detailing all aspects of flying this exciting aircraft including a full tutorial and a history of the Tornado with archive photographs.

### Limited Special Offers

As a special offer to readers of this magazine we have some amazing bargains, available only until 31 July 1994 and while stocks last. Order by phone or by mail and quote AX when ordering, please add £2 P&P.

Clarity16	£79.95
Videomaster A500	£49.95
Videomaster AGA	£59.95
Videomaster A500 RGB	£59.95
Videomaster AGA RGB	£90.95
ColourMaster	£18.95
ProFlight	£10.00



The Old School Greenfield  
Bedford MK45 5DE UK  
Tel +44 (0) 525 718181  
Fax +44 (0) 525 713716

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If you have difficulty obtaining our new titles, just call, quoting your Access/Amiga/Win/Unix/Connect card number and supply date and we will dispatch the goods within 5 working days. For an extra £8 we will dispatch the day of order by ParcelForce 24 hour service.





# HOW TO LOAD YOUR CU AMIGA COVERDISKS



## HOW TO LOAD COVERDISK 92

### EXPANDING DELUXE PAINT 5 WRITE PROTECT YOUR DISK!

You must have 2Mb of RAM and Workbench 2.04 to use this demo of DPaint 5. Also, it has been compressed in order to fit it onto the disk so before you can use it, it must be expanded onto another disk. Get yourself a spare write-enabled floppy, and follow these instructions:

1. Insert disk 92 and recall the Amiga
2. Double click on the CUA 92 icon
3. Double click on the DPaint 5 icon
4. Swap disk 92 for the spare floppy when prompted, and press Return.
5. Ignore bootblock comments
6. Follow any further on-screen prompts for disk swaps
7. When all disk activity has finished, boot from your hard drive or Workbench
8. Once Workbench has loaded, insert your newly expanded DPaint 5 disk
9. Double click the DPaint disk icon
10. Double click the DPaint program icon
11. Select your required screen mode by clicking once on either PAL low res or NTSC Low res
12. Set the number of colours with the slider in the bottom left corner
13. Click the Use B button to start the program

## DISK VIRUSES

We try to ensure that all our coverdisks are completely free of viruses. We always have the most advanced virus checkers available when the disk is compiled and every program goes through rigorous testing on all relevant Amigas. However, we cannot accept any responsibility for possible damage incurred by viruses or faulty disks which have escaped our attention.

## INSTALLING RDS 1.1

The RDS and UNRDS files must be in your current C directory. To function, RDS needs the file IFF.LIBRARY to be in the system's LIBS directory. Here are two example installations: the first for systems with a hard drive, the second for floppy-only systems with no extra drives

## HARD DRIVE SYSTEMS

- A. The easy way  
If you have a hard drive, it's not difficult. You need to copy three files from disk 92 over to the boot partition of your hard drive. There are two files from the C directory of disk 92 (RDS and UNRDS) and one from the LIBS directory of disk 92 (IFF.LIBRARY). Boot from your hard drive, insert disk 92 into the internal drive, open a SHELL window and enter the following five lines (replacing HD0 with the name of your hard drive's boot partition if it is not HD0):
- cd d0:lib
  - copy /f library hdd lib
  - cd d0:a
  - copy rds hdd a
  - copy unrds hdd c

## FLOPPY SYSTEMS

- B. The not so easy way  
(Only do this with your copy of Workbench disk, not the original)  
We'll assume you have no hard drive and just one floppy drive for this case. We're going to make a copy of your Workbench disk, delete some files to make room for RDS and install RDS onto the copy of Workbench.
1. Boot your Workbench disk
  2. Click the Workbench disk icon and select Duplicate or Copy from the menus (depending on your version of Workbench)

the menus, and click OK

3. Click the disk named 'Copy of Workbench', and select Rename from the menus. Rename the disk to Workbench
4. Reset and boot from your copy of Workbench
5. Open a SHELL window
6. Enter the following resident c copy
7. Replace the copy of the Workbench disk with disk 92
8. Type
9. cd d0:c
10. copy rds ram
11. copy unrds ram
12. cd d0:lib
13. copy /f library ram
14. cd ram
15. Replace the copy of Workbench in the drive

3. Follow the on-screen prompts, inserting a write-enabled blank disk when requested
4. Double click the Copy of Workbench icon, then single-click the Utilities drawer
5. Select Discard or Delete from

13. Type
14. copy /f library d0:lib
15. copy rds d0:c
16. copy unrds d0:c

14. RDS is now installed on your copy of Workbench

**REALTIME EFFECTS GENERATOR AND CHOON OF THE MONTH**  
Double click the TREG V1.5 icon to run The Realtime Effects Generator. Double click the Choon of the Month icon to hear this month's head-banging, heart-stopping track as chosen by our resident mix master Tony Hargen.

## HOW TO LOAD COVERDISK 93

Dragonstone is the original sequel to Darkmere is almost ready to be released to the masses, and it's going to be absolutely huge.

We have gone out of our way to get hold of a full level of the game for you to sit down and enjoy. Yes, hours of fun are contained on this month's games coverdisk, so read on through these brief instructions to see how to get the most out of your disk.

1. Switch off your machine for at least fifteen seconds to ensure that the memory is completely clear of any viruses that might be present
2. Insert the disk in the drive and switch the machine on. Now just sit and wait for the title screen of the game to appear. Press fire to start the game.
3. There's now a short delay while the level data is loaded. After that, you're on your own!

## IF YOUR DISK WON'T LOAD

If your coverdisk doesn't seem to work as it should, then follow this simple guide. Firstly, remove all unnecessary peripherals, such as printers, modems etc. Follow the instructions on these pages to the letter, and if, after that, you find that the disk still doesn't work, call the DiskExpress helpline on: 0451 810 788 between the hours of 10am and 5pm from Monday to Friday.

If they advise you that the disk is faulty, fill in your details in the form below and send this form, along with the disk and a 25p stamped and addressed envelope to the following address:

CU AMIGA DISK RETURNS, DISKEXPRESS, UNIT 7, WILLOW COURT, BOURTON INDUSTRIAL PARK, BOURTON ON THE WATER, GLoucestershire GL54 2NQ

NAME	_____
ADDRESS	_____
TYPE OF AMIGA OWNED...	_____
DISK NUMBER	_____
DESCRIBE EXACTLY WHAT HAPPENS WHEN YOU TRY TO LOAD THE DISK	_____



CU

## NEWS

## AMIGA — THE NEW ERA

**C**ommodore UK are now more confident than ever that their bid for what remains of the international divisions will be accepted by the liquidators and approved by the Bahaman courts. This will give them full rights to all existing (past and present) technology, trademarks and copyrights associated with Commodore and the Amiga plus any R&D and future development.

It would also release some of the current stock of A1200s and C032s held worldwide for sale although, we understand, not all. However it would mean that the Amiga would go into production again, almost immediately, with the new company concentrating on A1200s and C032s for the UK and some European markets and the A4000 internationally. Several firms have already approached Commodore UK to produce the machine for them once the go-ahead is given. ICL, who currently hold the Amiga maintenance contract, may be among those being considered for the job and it is almost certain that assembly will take place in Britain rather than the Far East.

Although not finalised yet, it has been said that if the management buyout is successful then the name Commodore will be dropped and the new company will take its moniker directly from its core product — the Amiga. "Amiga is a very strong brand," said David Pleasance in a recent interview with CU Amiga. "we are likely to drop the Commodore brand name and concentrate on it." The new company will be re-named along the lines of 'Amiga International', though full details of the name change will not be released until the management buyout has been successful.

It is unlikely, however, that the name Commodore will be completely dropped, just sidelined. David Pleasance told us: "It [Commodore] will still remain a trademark but will be used for other purposes." A new company 'identity' (ie logo, colours, symbols and so on) is being designed and the whole look of the Amiga name will change when accordingly.

The bad news is that because new stocks of Amiga will have to be manufactured there is likely to be a shortage as the run up to Christmas. However, anyone who wants an Amiga A1200 or A4000 or a C032 will be able to get one if they can hold out for a few extra months. This seems reasonable as it's still the only machine capable of delivering this sort of 32-bit performance at the price. David Pleasance has also promised value packed boxes of software. After its reorganisation the A1200 will have the backbone machines, with a brand new range of software and, possibly, additional RAM, speed and internet storage.

If you are looking for an Amiga this Christmas then place an order with your local specialist computer store. If the management buyout succeeds then stocks will sit another six months before the major chains. "Independents are champions of our cause — so they will get our support," said David Pleasance during the EGTS trade show in Ilkington, London.

Whatever happens, the current team in Maidenhead is fully behind the Amiga and are not prepared to let it disappear. In fact Colin Proudfoot, current joint managing director, claimed that business projections, based on the buyout, will have Commodore back in profit during 1995. This will be achieved by concentrating on their core products and vastly reduced overheads — no Commodore International adding the profits out of the UK into time. The official announcement of success or failure is expected no later than the 17th of September (though announcement dates have been made and broken before) so watch the national press and be sure to order your November issue of CU Amiga in advance. We will be hot on the trail.

## NO AAA FOR AMIGA

It's official! If the management buyout succeeds then the AAA chipset will be dropped. Commodore UK have said that the time spent developing the new AAA would be better spent updating the processor to a RISC based chip. This could be ready in 12-18 months and is expected to be between 25 and 30 times faster than the current A4000's 65040. More news as we have it.

## SHOW TIME

**9** 11 December 1994, Wembley Stadium. The time and the place to meet the new owners of Amiga. Hospitality. Despite continued uncertainty about the future of the Amiga plans are going ahead for a consumer show to rival the years best, with top software houses and peripheral manufacturers, distributors and magazines all in attendance. Called The World of Amiga Show it will be a biting celebration of the UK company does. Indeed get the international rights to the machine. Admittance will be by ticket, either in advance or at the door and if you're thinking about getting an Amiga or anything related to it the Christmas then put these dates in your diary. We'll be there and hopefully so will you. For more information call Commodore on 0629 770056.

## SIMPLY FANTASTIC

**S**im City 2000 is finally about to be released. However, you will need an expanded A1200 to run the game. "We could have produced it on an unexpanded A1200, but the game wouldn't have been nearly as detailed and much slower", a Maxis representative told CU AMIGA.

For those with lower spec machines: Maxis are releasing a Sim Classics compilation featuring Sim Life, Sim City Classics and Sim Ant for £34.99, for more information on Sim Classics call Maxis on 071 490 2333.



C032: A new version in the new year?

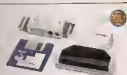




# POWER COMPUTING

DESIGN and INNOVATION

## POWERSCAN 4



Produce 256 greyscale images (on a AGA machine), scan in 64 greyscales (on AGA Amiga can only display 16), add colour to greyscale images, special effects, new support for 18-bit scanner, add text to scans. A1200/600 version available.

POWERSCAN 4	£119
POWERSCAN 4 OCB	£139
SCAN INTERFACE	£18
POWERSCAN 4 SIW	£38
OCB SOFTWARE	£49

## EPSON SCANNER

The GT-6500 and GT-8000 24-bit colour flatbed scanners from Epson scan up to A4 in size, with output resolutions of up to 300DPI on the GT-6500 and 1600DPI on the GT-8000 in 16.7 million colours, greyscale or line art. The scanners include either Powerscan or Image FX scanning software.

GT-6500 POWERSCAN	£599
GT-9900 IMAGE FX	£689
GT-8000 POWERSCAN	£649
GT-8000 IMAGE FX	£739
DOCUMENT FEEDER	£99

## COLOURSCAN

The new 18-bit colour handscanner produces stunning colours with clarity and verve, brightening up those presentations. With over 250,000 colours and award winning Powerscan software, anything is possible!

Colour and mono software  
Full colour manipulation  
Up to 4000PI  
256 greyscale (AGA machine)  
18-bit colour (AGA machine)  
OCR optional extra

COLOUR POWERSCAN	£239
------------------	------

## HARD DRIVES

We can supply SCSI or IDE 3.5"/5.25" hard drives in many different sizes, including cables and installation software.

80MB IDE 3.5"	£168
132MB IDE 3.5"	£199
132MB IDE 5.25"	£249
368MB IDE 3.5"	£319
920MB SCSI/IDE	£149
190MB SCSI/IDE	£199
368MB SCSI/IDE	£249
848MB IDE 3.5"	£349

## MISCELLANEOUS

HIDE INTERFACE	£19.99
----------------	--------

## MEMORY

We manufacture a vast range of memory cards for all the Amiga range of computers. Please telephone us for prices and availability.

## WORKBENCH 2.1

Release 2.1 enhances, including 2.1 software and user guide manuals.

2.1 EMHAMMER	£99
ROM SHARE INC. 2.04	£99
2.04 ROM CHIP	£29

## ACEEX MODEM

NOT BY APPROVED



External Fax and Data modem  
Receive and send faxes in the background  
Full Hayes AT command set supported  
Supports class 1, 2, and 3 for commands  
Fax send and receive  
Auto dial and auto answer  
Supports error correction and detection  
Leased line support  
All cables and manuals supplied

ACEEX MODEM v241s	£169
ACEEX v32 TRAFFAX	£199

## VIPER 68030 SERIES

Industry standard 72pin 38mm RAM upgradeable to 8MB RAM upgradeable to 128MB\* Full Kickstart roms\*\* Optional SCSI-II adaptor 68882 Maths Co-processor On-board battery backed clock Instruction & Data burst modes Faster than an Amiga 4000/40\*\*\*

\*Only on Viper 4050 \*\*Only on Viper 3850 \*\*\*Only on Viper 4050

## VIPER 28

Full 030 with MMU at 28MHz FPU upto 50MHz

8ARE BOARD	£749
4MB 30MHz FPU	£399
4MB 33MHz FPU	£389
4MB 49MHz FPU	£379
4MB 50MHz FPU	£399

## VIPER 40

Full 030 with MMU at 40MHz, FPU upto 50MHz

8ARE BOARD	£319
4MB 30MHz FPU	£369
4MB 33MHz FPU	£359
4MB 40MHz FPU	£429
4MB 50MHz FPU	£449

## VIPER 50

EC030 Running at 50MHz

8ARE BOARD	£249
4MB 30MHz FPU	£399
4MB 33MHz FPU	£419
4MB 40MHz FPU	£499
4MB 50MHz FPU	£479

## CO-PROCESSORS

30MHz FPU	£85
33MHz FPU	£98
40MHz FPU	£88
50MHz FPU	£138
SCSI II ADAPTOR	£79
8MB SIMM ANY BOARD	£319

## MEGACHIP



Increase your Amiga 500/2000 chip RAM to a total of 2MB. MegaChip does this by using its own 1MB of RAM and drawing extra memory from any other RAM you have installed in your Amiga. No soldering is required.

MEGACHIP RAM	£199
--------------	------

## POWER DRIVES

The Power Drive now includes Floppy Expander which allows you to compress files on floppy disks by up to 50%. Size Amiga Anti-click, Anti-virus hardware, Upgradeable to 1.76MB, Through port, Cyclone compatible chip. Built-in backup hardware and 2 year guarantee. \*Only if purchased with the Power Drive.

POWER DRIVE	£46
CYCLONE COPIER*	£16
PCEE1 A390 INT.	£48
PCEE2 A1800 INT.	£46
PCEE3 A9EE1200 INT.	£98

## XL 1.76MB DRIVES

The XL drive can be used with any Amiga computer and allows you to store a massive 1.76MB on a high density disk. The drive also acts as a standard 880K drive.

XL 1.76MB EXT.	£89.99
XL 1.76MB INT.	£75.99
XL 1.76MB INT. A1000	£95.95

## VIDEO BACKUP

VIDEO BACKUP SCART	£65
VIDEO BACKUP FHOHO	£49

## DISK EXPANDER

DISK EXPANDER	£35
FLOPPY EXPANDER	£5.95

## AWARD winning PR DUCTS

44/b Stanley St. Bedford MK41 7RW



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facsimile 0234 352207

Telephone

System owned

Description

Name

Address

Postcode

Cheque/PO for £

Credit card No.

Expiry date

Sign

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## A LEAGUE OF THEIR OWN

As you read this, the final touches are being put together for *On The Ball - The League Edition*. Like the World Cup edition reviewed a couple of issues ago, the League Edition is an English translation of the German smash *Anstoss*. The reason this one has taken so long to come across is the simple fact that the German and UK soccer leagues are very different, and a lot more changes than simple language changes needed to be made. *On The Ball - The League Edition* should be in the shops by the beginning of October. For more information, call Data Marketing on 071 372 7435.



save and score 4 goal for a corner  
Corner for Germany  
Shot by: Fokari  
the ball is crossed low  
across the goal

## WIZARD READER OFFERS

CU AMIGA have updated their offers pages and are giving you, the readers, the chance to get your hands on some of the best Amiga products around at old down prices.

For example, for just £49.95, if you order through CU AMIGA you can receive a floppy drive which features anti-click, anti-virus enable and disable switch and a two year warranty as standard.

This new look offers page features many other products as well, including disk drives and ram upgrades, all of which have been submitted to thorough examination by our technical wizards (sorry) at CU AMIGA.

For more information about these offers turn to page 138 or contact Wizard Developments on 0322 272908.

## GAMES CHART

The Amiga Top 10 Games Charts compiled by HMV.

- 1 Kick Off 3
- 2 Sensible Soccer International
- 3 World Cup Year 94
- 4 Beneath A Steel Sky
- 5 Arcade Pool
- 6 Skidmarks
- 7 Man United Champions
- 8 Elfmania
- 9 Frontier - Elite 2
- 10 Body Blows

## NEW PRINTER

One of the potential buyers of Commodore, Samsung, have unveiled a new dot matrix printer. The Samsung P2417 is a colour dot matrix printer with a price of £165, and is compatible Epson LQ and IBM ProPrinters.

Other specifications include a reasonable 160 characters per second in draft, 53 cps in letter quality, built-in power on test, and seven fonts (draft, elite, gothic, script, courier, serif and roman). Samsung can be reached on 061-309 0168.

## WHAT HOME ENTERTAINMENT? NEW MAGAZINE IS LIVE!

From September 20 to the 25th the biggest electronic consumer event of the year, LIVE '94, will be taking place at Earls Court. For computers, especially the Amiga, video games, surround sound systems, synthesizers, AV amps, camcorders, TVs and more LIVE '94 is the place to be. CU AMIGA, alongside our sister magazines *Nintendo Magazine*, *System* and *Saga Magazine* will be there in force, ready to answer your questions and waving the flag for the Amiga.

On the subject of HiFi, EMAP Images, the company behind CU AMIGA, is launching a new consumer electronics buyers guide magazine. What Home Entertainment? will be on sale September 20th, priced at £2.25.

"Audio, video and computer technology is becoming more exciting and more integrated. What Home Entertainment? will combine all of those leisure interests into a fascinating, all-encompassing, jargon free magazine," said project founder and Publishing Director Graham Taylor.





# FOOTBALL MASTERS 4

With nearly the first football management game for your computer, we have served thousands of satisfied customers during our 4 years of trading. Over 10,000 more hours (during 5 years) has been dedicated to the production of this constantly improving game. It is one of the most realistic and accurate representations of a professional football manager's annual challenges to tactically outwit and conquer every opponent.

**Managers:** 1 to 4 human players, Ratings, Performance statistics, sack and allies, 3 Difficulty levels, Manager of the month and season awarded, Points, Pts, easy access to any division in league with League & Cup, Prizes 22 teams, Division 1/2 & 3 have 24 teams, Playoffs, Tables, 7 Cup competitions with prize lists (2 legs, extra time, away goal rule, second halves, European Cup rules, 5 sides, merchandise player restrictions etc.), Finalists to play.

**Games:** Yearly Return/previous file, Week/Tables/minutes, Results from previous meeting on screen (goes back up to 6 seasons).

**EASY TO PLAY** Animated Wrestling game

Joystick or Mouse, 1 or 2 players



**Players:** Real-life statistics reflect on stats of 95/14 women with and positions, height, age, Use team marks, Contact & wage negotiations, Preferred foot (left/right/both), Legs, Kicks, Passing, Special talents, Talents, Goalskeepers (sagittae skill categories), Defenders, Midfielders, Attackers & Utility, Forwards, Foreign transfers, Utility players, Top 10 list sheet.

**Teams:** Training, Tactics (15 different styles), Aggression, Formation, clinics (specific player field settings (Left winger, Sweeper etc.)

**Club:** Sponsorship, Ground improvements, View opponent, Finances

**The Watch:** Real time scoreboard reporting goals & injuries yellow/red cards, Sound effects, Interventions permitted if any time to change tactics, formations and make a table. Physical graphical penalty participation (optional). Over 80 different referees.

**Other:** Fast load/save, Printer access, 20 Options to set various game preferences, Instruction book, Easy to play, Technical support.

**Plus:** Over 100 other reviewers' testimonials impossible to list here.

**Editor:** Allows you to amend various items in saved games. £12.00

**Scratch:** Dedicated version details available upon request.

PLAY BY PHONE SERVICE NEW RELEASE



## CRICKET MASTERS

This is a purely managerial cricket manager game that concentrates on strategy and includes plenty of relevant statistics. The game has been designed and developed by a true fan of the sport. It replicates everything that a real manager has to contend with and is a totally unique production that anyone with an interest in Cricket should experience.

A summary of the main features is shown below:

- ASA EQUITY & LAWN 18 league county teams: 50 overs per game
- 4 Cup competitions including Benson & Hedges, Nat West
- 20 different match umpires with accurate bowlers and stances.
- Accurate player details: Stance, height and age
- 27 different player attributes: Most skills have a direct impact on the effectiveness of each individual across during a simulated match
- Easy player selection: All game facts are clearly presented
- Betting and bowling coverage: Top batting and bowling tables
- 3 Different training intensities to boost batting, bowling or fielding
- Weather: Wind and light effects make an impact on ground conditions

Full match highlights for you watch the action ball by ball with full graphics and/or realistic sampled sound effects for significant events (Fours, Umpire decisions, etc.)



- Interventions are permitted at any time to change batting tactics or fielding positions
- 3 Batting/Bowling classifications (Normal, Attack and Defend)
- Choice of 15 different field patterns
- Full scores and results with best batting and bowling figures
- Other staff (Physio, Groundkeeper, Scout) can be hired and fired
- Annual league fixtures listing: Current week and last league results
- View current cup competition draws and historic records
- Real time transfer market: Player contract and wage negotiations
- Sponsors, Transfer prices, Transfers, Fear ground fines, Manager rating
- 15 Options to alter game preferences, Load/Save game
- Instruction book with plenty of extras
- Plus access from file details that are available in list here

## STABLE MASTERS V2

This game has been designed to be as close to real racing as possible. Five years of development by a clever racing expert has led to the second revision of this Fast Horse Racing Simulation.

Up to 4 players can participate as Owner/Trainers with the primary objective of becoming the top rated trainer, in respect of prize money won, at the end of each racing season (March to November). There are up to 35 other intelligently controlled computer trainers to compete against and compare your personal performance.

- To achieve this you must discover a potential champion and train them so that they become capable of competing well and winning any of the 42 big prize money races (Handicaps and Group) eg. The Derby
- To give you an idea of the tasks involved in this game to assist you reaching your objective we have listed the main features below:
- 250 horses each with over 60 individual variables
- 26 different race courses (2 all weather), real life characteristics mimicking the diversity of racescourses in the UK (Descriptions provided)



- 20 Jockeys who vary in ability and breaking bias, Orders & Feedback
- Formbook and Win Summary Cards cover the previous 200 races
- Animated race display or just the result: View Declaration List for races
- Very informative report by Handicapper list: Trainers' Bookmakers
- Reports similar to racing press: Real life Handicaps & Race Types
- Visions, Injuries & Vets, Load/Save game. Many other extras included
- Version 1 is available upon request (Simple training & betting) £15

## ORACLE

By Oracle, regulated by the Isle, this program achieved part second. This led to a series approach from a well known national book market. Reached in favour of supporting the public.

**Phoenix Statistics:** 104 wins out of 166, as from 2/6 to 1/9/73

**Example:** This program tells you exactly what to do. You are NOT permitted to amend our system unless so many other similar programs. How confident can you be in something that invites amendments?

**Features & Development:** Three years full time race analysis and experimentation to refine and test the prediction system.

**Key Knowledge:** Plenty of wage lists from contacts in the below list.

**My knowledge:** No racing knowledge required, want to use, actual book market info.

**As soon as our programs predictions have a positive impact on the betting odds we will start accepting new buyers.**

**Warning:** If you... highly recommended approach. If any update fails to break even or lead the real one free of charge from £25

**Low insurance:** Highly likely. Buy now before success leaves increase

## World Cup Cricket Masters

A fantastic graphical and/or realistic representation of Cricket has been fully completely written by a traditional fan. You can physically participate with batting and/or bowling or leave it to the computer to automatically handle. See full features list below:

- GAME OPTIONS**
  - 1 Day limited overs or test.
  - While or coloured clothing
  - Three Cricket grounds
  - Load/Save game, Skill levels
  - Computer/Human players
  - WINDING & TOW
  - Sound Commentary
  - Umpire signals
  - All the strokes cut, pull, drive, etc.
  - Appeals, dropped catches, run outs
  - Bowlers, wickets and no balls.
- STATISTICS**
  - Scorecard & bowling analysis
  - Weather and ground reports
  - Wayne White
  - Handicap Chart
  - PLAYER VARIETY**
    - Realistic control of batsmen's
    - Left and right handed players
    - Range of batting players
    - Follow to record game stats
    - Bowler types include seam, swing, change and both types of spin with 2 speed levels.
- FRIENDLY CONTROLS**
  - Easy driven with point & click
  - Large 3D scrolling screens covering the action playing area
  - Mouse controls bowler's line, length, direction field settings
  - Realistic control of batsmen's
  - Attack level, strokes and running between wickets
- VARIABLE CONDITIONS**
  - Surface will pose all sorts
  - Rain, bad light, cloud cover, temperature and humidity.

## 24 HOUR CREDIT CARD HOT-LINE



(0702) 600557



DESCRIPTION	A.G.	PRICE	TOTAL
Professional Football Masters V4		24.95	
F.E.M. Editor V4		12.00	
Stable Masters V2		24.95	
Oracle Horse Trainer (RRP £99.95)		75.00	
Cricket Masters		24.95	
World Cup Cricket Masters		24.95	
Wrestling Masters		19.95	

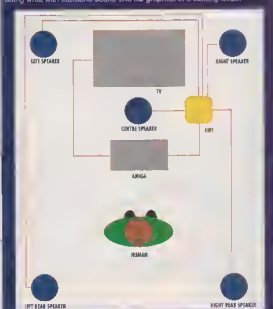
NAME \_\_\_\_\_ TELEPHONE \_\_\_\_\_  
ADDRESS \_\_\_\_\_ POSTCODE \_\_\_\_\_



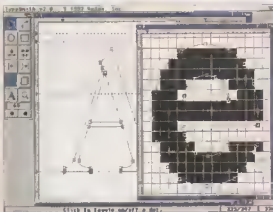
# SURROUNDED!

Amiga games are so popular worldwide because they combine good graphics, involving gameplay and superb sound for very reasonable prices. So now, just when you thought things couldn't possibly get better they have. Playing your Amiga is about to become a veritable feast for the senses as several software houses are now known to be looking at ways to include surround sound in their games. This means that if you Amiga is wired up to a stereo with surround sound speakers you'll not only get stunning sound effects from the left and right speakers, but also added sound effects from the centre and rear speakers. You will, for instance, be able to hear your enemies creeping up on you in any direction even before they appear on screen.

Surround sound audio is set to combine with stunning 3D rendered graphics to keep Amiga games at the forefront of games technology over the coming months. We will hopefully bring you a full report on just who is doing what with surround sound and 3D graphics in a coming issue.

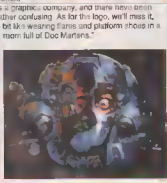


SURROUND SOUND ACTION COMING TO THE AMIGA SOON. THE LEFT AND RIGHT FRONT SPEAKERS HANDLE MAIN SOUNDS, CENTRE SPEAKERS TIE SPEECH ETC TO THE SCREEN AND THE REAR SPEAKERS TO PRODUCE BACK GROUND EFFECTS



# GREMLIN ARE REBORN

CU AMIGA are sad to report the passing of an industry legend Gremlin Graphics, the company that brought you everything from *Monty Mole* and *Gary Lanker* to *Lotus* and *Ulti Dwt* has ceased to be. It is an ex-software house. But oh no, you cry. Whoever will we do now? Don't worry little ones, as it has merely changed its name and image to Gremlin Interactive. To reflect the company's confidence, the rainbow logo is about to be replaced. Said Gremlin's MD Ian Stewart: "Of course they'll be some sadness to see the old style go but we do need to reflect the tremendous change in the company as well as position ourselves correctly for the new interactive entertainment industry. Gremlin never was a graphics company, and there have been times when this has been rather confusing. As for the logo, we'll miss it, but it was beginning to be a bit like wearing flares and platform shoes in a room full of Doc Martens."



# SOFTLOGIK TYPE SMITH

Softlogik, publishers of *PageStream*, have released version 2.5 of *TypeSmith*, their font editor. The new version has several enhancements including the ability to load and save TrueType fonts. TrueType is the format for fonts found on Apple Mac and Windows (on PCs) so there are lots of fonts available.

The program can save the fonts out in a file format compatible with normal Amiga applications, has a comprehensive *AFMX* library - allowing it to be controlled from other programs, and a comprehensive selection of font editing tools. *TypeSmith* are also helping completion of the much awaited *PageStream 3*. This follows up to the best selling Amiga DTP program, *PageStream*, is now awaiting final printing of the manual. The program complete with text editor, masses of fonts and clip art and a picture editor should be available by the time you read this.

For a sample of what's planned for the new version read our exclusive preview in the June issue of CU AMIGA. For further details contact Emerald Creative on 081-715 8866

typeSMITH  
The Professional Amiga Font Editor

1. 16-bit graphical interface and editing tools  
2. 16-bit graphical interface and editing tools  
3. 16-bit graphical interface and editing tools  
4. 16-bit graphical interface and editing tools  
5. 16-bit graphical interface and editing tools  
6. 16-bit graphical interface and editing tools  
7. 16-bit graphical interface and editing tools  
8. 16-bit graphical interface and editing tools  
9. 16-bit graphical interface and editing tools  
10. 16-bit graphical interface and editing tools

2.0  
TRUETYPE 2.5  
VERSION



# ZAP YOUR MATES WITH A





# COMMODORE WRITES



It sure you're all keen to know what's happening with the progress of our attempts to buy Commodore and secure an exit-infringe for the Amiga. I'd like to be able to tell you the deal is all signed and sealed, but unfortunately we're not quite there. It's getting tantalisingly close, and I'm pretty confident that by the time I sit down to write this column next month I'll be able to bring you the good news.

What I can tell you is how incredible the support has been for our bid. I've had letters and help and support - and even money - it comes casual it's really heartening to be on the receiving end of such a lot of goodwill, and it makes the realisation again what an amazing phenomenon the Amiga is. I can't think of sturdy products that would generate such a level of feeling in similar circumstances. We've been in the fortunate situation of having a number of different financiers interested in supporting our bid and the partners we've chosen are exceptional. More about that in the next issue!

While we wait with bated breath, development of new product goes on. I've recently returned from a visit to the States where I visited the Amiga engineering headquarters in Norristown. I've been involved with the Amiga since the very beginning, in fact I celebrated 11 years with Commodore last week, so I'm difficult to impress. But the ideas and developments coming downhewn in the next 6-12 months are something special. I guarantee you'll be impressed. Meanwhile the planning of the World of Amiga show goes on apace. The dates have been fixed for 9-11 December at Wembley so you'll be able to eye an orgy of Amiga goodies just in time for Christmas. We think this will be the best Amiga show yet, featuring games arcade, live entertainment and exciting new products.

Although we've only just started selling stands at the show, interest is high, the exhibitors are as keen as we are to make the show a fantastic celebration of 10 years of the Amiga - as well as its rocky future. We're planning a dedicated area for all of you who belong to Amiga or Commodore user groups. After all your on-going support has been essential to the machine's continued success and we want to involve you in the show as much as possible. We'll also be running competitions both before and at the show which will give you lots of chances to win Amiga prizes. Keep reading the magazines over the next couple of months for details.

While I'm on the subject of shows, we're also going to have a major presence at Futureworld from 15-30 October at the NEC in Birmingham. Futureworld is a part of the Ideal Home Exhibition and the Motor Show which are being run jointly. It will be a showcase for the 'home of tomorrow' and we're the only company to have been asked to exhibit a computer games platform. Our stand will be positioned at the bottom of a spectacular visitor ride, making us very much the centre of attention. The organisers are expected over a million visitors over the 13 days of the show. Let's make sure lots of them are Amiga fans!

All this talk of shows makes me think of Christmas and I'd like to take this opportunity to let you know what we think our plans will be. Obviously we can't make it all happen until we know whether our bid has been successful, but we've got all our plans just waiting to be put into action. There have been some rumours floating around that we won't have any products in the stores for Christmas. I'd like to personally reassure you that as things stand at the moment, this simply won't be true. There will be supplies of all our machines around, although not quite as many as usual. That's because we haven't been manufacturing for a while and we'll need to catch up on lost time. This will only be a temporary situation while we get production back up to full speed.

The software publishers are very enthusiastic about the Amiga's future and have been very supportive of our bid. They've reassured me that there will be plenty of exciting new software around for both the Amiga and CDS2 and Amiga 2860. Watch this space!

# PUBLIC FANTASIES

Playtime are gearing up to release what could be one of the most interesting football games ever. Fantasy Football look off in a big way last year, attracting over 3 million people, as well as producing an extremely popular TV series hosted by popular comedians Frank Skinner and David Baddiel (see p. below). As a result, Playtime have signed up both the stars of BBC TV's *Fantasy Football League* to endorse their own computer version of the game. The game itself lets you form leagues of individual player leagues. Each player then builds their own team from existing Premier League players, and then matches are run. The game then draws up a league which is continually updated as you play the fixtures. Where *Skinner And Baddiel's Fantasy Football* beats the real thing is in actually providing you with a match result, giving you a true points system that reflects the football league.



It remains to be seen how the game will work in practice, but in theory it is certainly interesting, and quite original to boot. We'll have a full review soon, but for more information call Playtime on 071 721 7607.



# EVEN MORE LEMMINGS

Just in case you hadn't had enough of the little plighers to last you a lifetime, Paygnosis have announced their intention to release even more games based upon these suicidal creatures the *Lemmings - All New World Of Lemmings - The Max Series*. Either then be a traditional sequel, the game will be released in four parts over the course of a year, with each episode of the mini-series featuring three tribes of Lemmings and working as a stand-alone game however collect the set and you get the full story of the Lemmings surviving a disastrous shipwreck.



In this one you will only start with a handful of the little guys, the rest of the tribe needs to be rescued from wherever they are trapped before they can be helped. The game also features far larger sprites than before, combat stages, more tools to use and over 120 levels plus hidden stages! More news as we have it, but for more information call Paygnosis on 051 709 5755

# 3DCD COMES ALIVE

Not a nemesis for a new android in the new Star Wars movies, but a collection of three dimensional objects on a CD-ROM disc for your favourite computer. The CD ROM disc, that can be loaded on any Amiga with a CD-ROM drive, contains not just 3D objects, but also environments, rendered images and brushmaps. The 3D objects are saved in LightWave, Image and for PC owners 3D Studio. The disc is produced by Phosphor Dot Productions, tel. 0843 2921 50



The collage features a large central image of Tiger Woods in mid-swing. Surrounding this are several smaller images and text overlays. In the top left, a golfer is shown on a green. In the top right, a golfer is shown on a tee box. In the bottom left, a golfer is shown on a green. In the bottom right, a golfer is shown on a tee box. There are also text overlays, including a list of players and a table of scores.

**Players:**

- USA: Tiger Woods, Phil Mickel, Fred Couples, Mark O'Meara, John Daly, Matt Kuchar, Jim Furyk, Ben Curtis, Stewart Cink, Jason Duggan, Jeff Maggioni, Matt Jones, Tim Lincecum, Mike Weir, Ian Poulter, Colin Montgomerie, Paul Lawrie, Ian Woosnam, Simon Dunlop, Mark Hensley, David Howell, Ian Baker-Finch, Ian Poulter, Colin Montgomerie, Paul Lawrie, Ian Woosnam, Simon Dunlop, Mark Hensley, David Howell, Ian Baker-Finch.
- Europe: Tiger Woods, Phil Mickel, Fred Couples, Mark O'Meara, John Daly, Matt Kuchar, Jim Furyk, Ben Curtis, Stewart Cink, Jason Duggan, Jeff Maggioni, Matt Jones, Tim Lincecum, Mike Weir, Ian Poulter, Colin Montgomerie, Paul Lawrie, Ian Woosnam, Simon Dunlop, Mark Hensley, David Howell, Ian Baker-Finch.

**Table of Scores:**

Player	Round 1	Round 2	Round 3	Round 4	Total
Tiger Woods	71	68	70	72	281
Phil Mickel	72	69	71	73	285
Fred Couples	73	70	72	74	289
Mark O'Meara	74	71	73	75	293
John Daly	75	72	74	76	297
Matt Kuchar	76	73	75	77	301
Jim Furyk	77	74	76	78	305
Ben Curtis	78	75	77	79	309
Stewart Cink	79	76	78	80	313
Jason Duggan	80	77	79	81	317
Jeff Maggioni	81	78	80	82	321
Matt Jones	82	79	81	83	325
Tim Lincecum	83	80	82	84	329
Mike Weir	84	81	83	85	333
Ian Poulter	85	82	84	86	337
Colin Montgomerie	86	83	85	87	341
Paul Lawrie	87	84	86	88	345
Ian Woosnam	88	85	87	89	349
Simon Dunlop	89	86	88	90	353
Mark Hensley	90	87	89	91	357
David Howell	91	88	90	92	361
Ian Baker-Finch	92	89	91	93	365

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# STORAGE

Over the next five pages Andy Leaning takes you through everything you need to know about Amiga storage devices including how they work, which is best, and what the future holds in store (sorry) for them.

1





The great thing about getting storage devices for the Amiga is that you're not too limited by budget considerations. There are storage products to suit everyone's wallet. OK, maybe the performance increases as you spend more, but your trusty Amiga will get faster even if you spend just £49 on a floppy disk drive. And with prices dropping faster than stones and technology advancing almost daily there's never been a better time to increase your disk storage capacity. Increasing program size, high resolution pictures and the use of sampled sound on Amiga software has meant that having bags of disk space is now more important than ever before. Over the next few pages we examine the numerous storage options open to you and reveal the dark secrets of Amiga storage devices.

## WHAT EXACTLY ARE STORAGE DEVICES?

First of all let's look at why we need storage of all. Storage is a crucial concern for the Amiga. Why? Because your Amiga has a very powerful and complex operating system; it stores large parts of it on disk and loads them only when needed. Hence the need for lots of disks and disk space.

Loading from disk takes a long time though (in computer terms at least) and the Amiga has to wait until it has finished loading before it can do anything else, also the rapidly increasing number of Amiga programs using high resolution, full colour pictures means that unless you want to spend half you waking the waiting on your programs to load or pictures to render you had better get your hands on some storage facilities.

So what are your options? Well, each Amiga floppy disk can hold up to 880K of data, so you can store your information on disk. However, this could mean eternal disk swapping if you wanted to load up a particularly large program. So adding an extra disk drive would speed up matters considerably and because

technically, you can add up to eight disk drives this course of action would drastically reduce the amount of disk swapping required. Remember, disk drives are one of the cheapest peripherals available for the Amiga, starting from as little as £49.

The next major storage peripheral is a hard drive. These are very similar to floppy drives, but have the advantage of being very much faster, with greater storage capacity and are completely self-contained - no swapping here. Typical hard drives on the Amiga can store between 80Mb and 120Mb of information (equivalent to about 100 floppy disks) without having to change disks once.

Most Amiga hard drives are fitted internally, although there are several models that are connected externally, eg, the Archos Overdrive.

Another popular storage type is the CD ROM drive. CD-ROM drives are like a combination of floppy drives and hard drives. They have a capacity of approximately 600Mb, and they use a small 5" disc which, except for whatever is written and stored on it, is virtually indistinguishable from an audio CD. The drawbacks are that you cannot write data to them yet, ie, they are read only and have slowish access speeds compared to hard drives. CD ROM drives are used where very large amounts of information need to be stored (reference programs, clip art libraries etc). Another often overlooked advantage of CD-ROM is that the Amiga can read PC and Mac CD ROM discs, which, although they may contain Mac or PC programs, often contain vast libraries of additional clipart, fonts and images which you and your Amiga can make use of.

## SO HOW DO THEY ALL WORK THEN?

Well, let's start at the beginning, since the origins of man, back in prehistoric times, the humble floppy disk has been a reliable but slow system of storing and retrieving files. And why is it



so reliable and trustworthy (yes Andy, why? Mine never seems to work - Ed) The reason lies in the use of a tried and tested technology: electromagnetism. Inside a floppy disk drive is a read/write head that moves over the disk surface reading data from the floppy disk, and writing it back out. Inside the drive the disk spins with the head moving across the radius of the disk and data is stored in a series of rings (otherwise known as tracks), with the drive reading each track and then moving onto the next. The actual reading and writing process works on a similar basis

to normal audio tape. The binary data (if you go right down to the very deepest, darkest, core of your Amiga you'll find everything is stored as a series of zeros and ones - known as binary numbers) is converted to electromagnetic pulses.

These pulses are recorded (when saving data) on magnetic material that coats the surface of floppy disks. When the Amiga loads files and programs the disk drive head moves over the floppy disk surface sensing the magnetic pulses, which it then converts back to binary data to be saved in the

The Archos CD-ROM drive - only one of three PC/MAC peripherals







memory of the Amiga all ready for processing

## IT'S A HARD JOB

Instead of having a single, so called floppy disk (even though it's not that floppy on the outside) which you can simply insert and eject from the Amiga you could use a hard drive. This is a sealed unit, containing a number of small magnetically coated disks. By having multiple disks stacked upon one another, each with its own read/write head, hard drives can store much more data than a single floppy disk.

By spinning the disks at a very high speed a current of air is created just above each one. This lifts the hard drive read/write head allowing it to be moved around the disk, floating just above the surface, thus enabling the computer to record or read the electromagnetic signals to or from the disks.

A small motor in the unit controls the precise movement of the head over the disk, the speed this motor

can move and the disk revolution speed determine how fast data can be loaded and saved from the drive.

In hard drives this rotating head is unbelievably close to the disk surface, so close in fact that a grain of dust or a human hair is big enough to cause major problems, especially if they get between the head and the surface. To keep this potentially harmful problem from occurring all hard disks are completely sealed and cannot be opened.

The storage capacity of floppy disks and hard drives is also determined by the amount of data that can be crammed onto a track.

The problem is that technology has got to stage where more information can be fitted onto a track than can be read in a single revolution by the drive head.

For this reason tracks are further split down into sectors, a sector being the amount of data that can be read from a track at a time, to read all the sectors on a track the disk will then have to be rotated several times.

The storage capacity of hard drives, and to an extent floppy disks, is increasing all the time, and for the immediate future there is no storage system that can rival them for being

able to read and write large volumes of data at a comparable cost.

## CD TECHNOLOGY

The CD-ROM drive mechanism is, unlike the hard drive and floppy drive, not based upon magnetism at all. Instead it relies on high precision optical engineering. Each CD is made up of a single track, winding its way from the inside to the outside of the disc in a spiral. Along this track are billions of tiny holes — we're talking atom size here. The presence of holes in the surface represents binary data — a hole or no hole — representing a single binary bit of one or zero.

Inside the CD-ROM drive is a tiny read/write head that works its way around the spiral moving around and across the disk at the same time. As it proceeds it shines a laser at the surface which reflects off the surface. A sensor on the head picks up the reflected beam (reflection or no reflection) to drive electronics which convert this information into a binary one or zero.

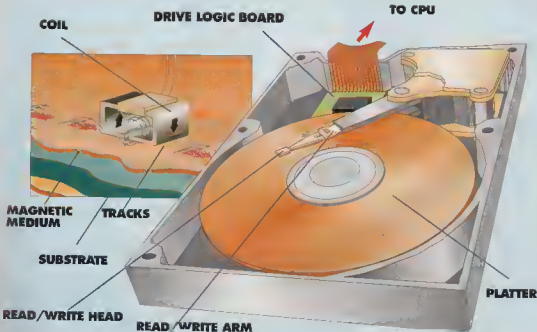
## IDE AND SCSI

Most Amiga hard drives for the A1200 and A600 are connected via an internal expansion port called IDE.

This is basically a simple hard drive interface and to fit a hard drive to it you simply plug it in. The OverDrive and SmartDisk, on the other hand, connect via the PCMCIA interface on the outside of the A500/A1200.

Another possibility for connecting hard drives to the A1200 is to use a SCSI interface. SCSI is a more sophisticated hard drive interface than IDE, allowing you to connect up to seven units at once (IDE only allows two), it's also a lot faster. The problem is that SCSI isn't built in to the Amiga and you'll need to buy a specific interface if you wish to connect such a hard drive to your A1200. Both the GVP A1230-II or Blizzard accelerators cards for the A1200 have optional SCSI interfaces available for them.

A major advantage of SCSI is that you can connect a massive variety of other types of storage devices to the Amiga with them. Syquest drives (a cross between floppy disks and hard drives giving either 44 or 88Mb per disk), optical drives, massive hard drives (one gigabyte and more!) and high speed tape backup systems are all available through SCSI interfaces. SCSI devices are very popular on Apple Mac, and to an extent the PC, which ensures that such peripherals are also fairly cheap.



The Internals of a hard drive — just look at the detail of the drive head



Now that you've got some idea what types of storage devices are available for your machine, here is breakdown of all the options available.

# CHOICES, CHOICES



This Amitek drive - lots of features at reasonable price.



## DISK DRIVES

The disk drives we have chosen as the pick of the crop are the Power Computing Power drive E60 (tel. 0234 273 000), Amitek Deluxe E59 (tel. 081 309 1111) and Wizard Saturn E49 (tel. 0522 872908).

These drives work on all Amigas and feature anti-click technology, hardware anti-virus circuitry, disable and through port for extra drives. They are well built and look smart.

They are all standard Amiga 880k

drives (ie can format disks with 880k of disk space) and Power Computing also sell a higher 1.78Mb capacity model at £59.

## HARD DRIVES

The Archos Overdrive is possibly the best A1200 hard drive. An external IDE hard drive that plugs into the PCMCIA interface of the A1200, it's really easy to install. It is also one of the fastest hard drives CU AMIGA has seen; in tests it clocked an

amazing transfer rate of 1430k per second, while the previous record holder (the GVP A530 for A500s) only managed 800k and an internal IDE drive for the A1200 backed over at 609k! This is one fast drive.

The only problem with the Overdrive is that tends to prevent some expansion devices working. This was one of the reasons we didn't give it a Top Rated award back

In March '94. But otherwise its highly recommended for A1200 owners wanting a first or possibly second hard drive. The Overdrive is available from Sisa (081-309 1111) and Ind (0543 419 999). Prices start at £150 for a 20Mb capacity, although we recommend you opt for the biggest you can afford.

Smart Star is another good, but slightly smaller hard drive from Archos. A full review of this can be found on page 99 of this very issue so we won't dwell on it for too long. Suffice to say that it's a great little hard drive for the A600 and A1200. It's very fast, but somewhat lacking in design and is only available in 20Mb and 30Mb capacities which is almost certainly too small for most Amiga users.

## CD-ROM DRIVES

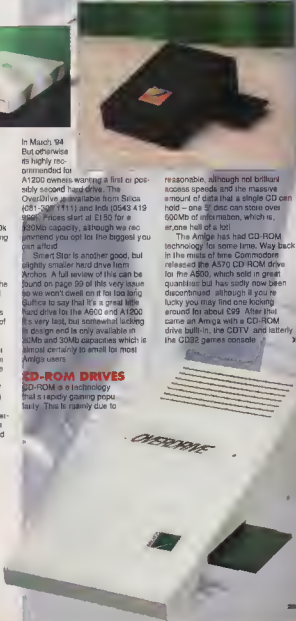
CD-ROM is a technology that is rapidly gaining popularity. This is mainly due to

reasonable, although not brilliant access speeds and the massive amount of data that a single CD can hold - one 5" disc can store over 600Mb of information, which is, er, one hell of a lot!

The Amiga has had CD-ROM technology for some time. Way back in the mists of time Commodore released the A370 CD-ROM drive for the A500, which sold in great quantities but has sadly now been discontinued, although if you're lucky you may find one kicking around for about £99. After that came an Amiga with a CD-ROM drive built-in, the CDTV and latterly the CD32 games console. »



A typical Amiga floppy drive, but do you know how it works?







Earlier this year CU AMIGA exclusively revealed Commodore's plans to unveil a CD-ROM drive for the A1200 which, as I write, still hasn't been launched. In its place, however, is the OverDrive CD-ROM. Built by the same company that make the OverDrive hard drive. This product has a prestigious family history, and is set to sell by the bucket load.

Like the OverDrive hard drive it plugs into the PCMCIA port of the A1200 and offers a good level of compatibility with games for the CD32. Although it won't be able to play FMV/Digital Video CDs, it does support normal audio ones. PhotoCD and CD+G disc formats. It can also load software off normal Amiga CD-ROM discs. Including the Final Fish collection, and numerous other PD discs. For A1200 owners this is a must have product. Once again its available from indi (0543 419 598) or Silica (061-309 1111) from £199.

## A600 CD-ROM SENSATION!

As I write these pages my spies have

revealed that several companies are already at work developing a CD ROM drive for the A600. Initial reports say that it's likely to be closely based on the technology as used in the OverDrive CD-ROM but will obviously not be able to run CD32 games (the A600 was designed before the CD32 came out and so doesn't have the necessary hardware). You will however still be able to load Amiga applications and files, and use PD discs etc.

## THE FUTURE STARTS HERE

So there you have it. Storage as we know it. But what does future hold? Well if I knew that I'd be so rich I wouldn't need to worry about it anyway but there are one or two common sense observations that we can make.



Firstly, the amount you pay for disk storage space, in whatever form it is, will continue to fall. The price per megabyte is currently around £1.50 judging from the adverts in last month's issue of your favourite magazine. This is bound to drop, there's nothing you can do about this - it's simple economics, whatever you buy today will be cheaper in future - fact. The only thing you can do is protect your investment and try to reduce the time it will take before you have to buy again. For this reason buy big, go for the biggest hard drive you can afford. The smaller you get the quicker you'll need to buy another unit.

Secondly, technology is developing faster now than ever before. Last year the GVP A530 was the fastest Amiga drive, clocking a transfer rate of 900K per second, in under twelve months this has increased by over fifty percent with the Overdrive clocking transfer speeds of practically 1.5Mb per second. It won't be long before standard Amiga hard drives can fill the entire two meg RAM of an A1200 in under a second - think about it! Again, there is nothing you can do about this, but this time you can save yourself money. Apart from the ego boost of having the fastest hard drive in town is there any real need

to go for the latest and therefore most expensive when all it's going to be out of date in a matter of months. Save yourself money and give priority to the amount of storage capacity you want instead!

## JARGON BUSTER

**ANTI-CLICK:** Amiga disk drives have an annoying constant click when not in use. Drives featuring anti-click surprisingly enough don't have this click.

**IDE:** Integrated Device Electronics. A term referring to a type of hard drive that contains its own interface and controlling electronics.

The last assumption is more of an educated guess. CD-ROM drives that can not only read but also write are already available but they cost a fortune. But how long will it be before they become mass market and affordable - a guess that most people think is some time. In other words think carefully about where one of these will go. My bet is on the PCMCIA interface, it's therefore probably worth asking yourself if you'd buy a writable CD ROM drive, and if so do you want the interface port that it will probably see blocked by a hard drive which could have gone inside the Amiga. I doubt it, my tip is go for internal hard drives. **CU**

## POWER UP YOUR FLOPPY!

Did you know that you can double the amount of space on a floppy disk or hard drive?

Simply pop on a buy-a-program called Disk Expander from Power Computing and install it on your disk. It compresses the data on the disk and uncompresses it when you come to load it. By doing so it reduces the amount of space needed on the disk to hold programs and files, thus increasing the amount of space left.

It's a very clever utility and an extremely useful program.

## HARD DRIVE PERFORMANCE, PAST PRESENT AND FUTURE

TRANSFER RATE  
K/SECOND

	0	100	300	600	900	1200	1500	1800	2100	2400	2700	3000	3300	3600
<b>A530</b> 1983														
<b>OVERDRIVE</b> 1984														
<b>THE FUTURE</b> 1986 AND BEYOND														

A530  
1983

900K

OVERDRIVE  
1984

1430K

THE FUTURE  
1986 AND BEYOND



# DRAGONSTONE



Cut a path through Agon's demonic hordes and explore the vast forgotten lands as you play the hero in this fantasy role-playing adventure, set in a top-down, multi-directional perspective across seven extensive levels.

A mystery with a twist in the dragon's tail..

Available on: Amiga (compatible with 500, 600 and 1200),  
Amiga CD32.

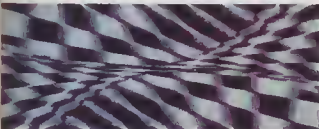
**CORE**  
DESIGN LIMITED

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55 Ashbourne Road Derby DE22 3FS Telephone (0332) 297797 Facsimile (0332) 301891



# GOING PUBLIC

Some would say the public domain system is the backbone of the Amiga community. There are thousands of programmers, musicians and artists, all giving away expertly crafted software for nothing. It sounds like a naive dream, but it's actually a reality. But what's it all about? How does it work? How can you become a part of it? Tony Horgan has the answers.



## WHAT IS PD?

Public Domain software is created by enthusiastic computer users who want no payment for their programs. PD software can be whatever the author wants it to be: a game, a word processor, an art package, a music or graphics demo, a magazine on a disk, a slideshow, an educational program, an obscure utility for a minority of specialist users—the list is endless.

Why do people do it? Because they want to. Much of the software on the PD circuit could not be released commercially for a number of reasons. A lot of PD is "disposable." Demos, animations, disk megazines and the like may only be used a few times, then the disks are formatted. Some are for too obscure for an established commercial distributor to understand, and others may only have a very limited audience. In general though, most PD software is developed for the satisfaction of the authors, and for the benefit of the rest of the Amiga community.

## HOW TO RELEASE PD GOODS

The best way to release your own PD is through the PD libraries. These are organizations that sell PD disks

for nothing more than the price of the blank disks, and the running costs of duplicating, post and packing and so on. The idea is that the libraries make no profit from selling the disks. You sell your program released to the masses, and wash your hands of all the advertising and mailing chores.

All you do is send your disk, or disks, into any or all of the PD libraries you can find, with a letter giving permission for the library to distribute it for no financial gain, and a statement that says these disks are your own work, just to clarify the situation. You should also put a similar notice on the disk itself. In the form of a text file or an intro screen. It's then up to the PD library to decide whether they want to add your disks to their catalogue. Most have some form of quality control and won't just accept any disk. You should try to produce the best product you can, but so long as you don't come up with a complete pile of tripe, you shouldn't have too many problems getting it distributed. Look through the adverts in this magazine and you'll find stacks of PD libraries to target.

## HOW TO WRITE PD

There are no rules on this score. As PD software doesn't need to make a

profit, you don't have to pander to any particular market or audience. You're free to do whatever you like, however absurd, alternative, weird or original it may be. You don't have to be a programming boffin either (although it does help), as there are plenty of development systems to help you get your ideas out of your head and onto a disk. Here are some of the main areas of PD software and the tools you could use to create them. Some are commercial packages others are PD. The PD programs are preceded with an asterisk (\*). Many of the commercial packages have appeared as coverdisks on previous issues of CU AMIGA, so check your disk collection. Look through the adverts in this issue for the best prices on any you don't have. Look out for the fully-functioning new version 2.0 of the excellent Videotracker, to be given away exclusively with the next issue of CU AMIGA.

These recommendations are assuming you cannot program in languages C, Assembler or any other low level language, which will of course give superior results in many cases (games, demos and utilities especially). Games: AMOS, Blitz Basic, Demos: Videotracker, \*Demomaker, Demomagic. Music disks: \*OctaMED, \*Protracker, \*Sons, Deluxe Music Construction Set. Utilities: AMOS, Blitz Basic. Animations: \*MovieSetter, Deluxe Paint, Entrance, Aegis Animator, Fantavision. Multimedia presentation: \*Hyperbook, Can Do, Scroz, Mediapoint. Disk magazine: \*Magnum, Menu, Educational: AMOS, Blitz Basic, Hyperbook.

## COPYRIGHT CAUTION

Just because you're not selling your PD disks for profit, you're not exempt from copyright laws. A few years ago, you could get away with sampling a complete song and putting it on a disk (a pointless exercise, but it was a popular activity for a while). Since then, quite a few PD libraries have had visits from the boys in blue who have confiscated large numbers of disks. These days you have to be more respectful of copyright, although you can still get away with a certain degree of mismanagement. Disks such as the Deep Space Nine slideshows, clones of old arcade games, *Final Frontier* (an unofficial

*Star Trek* disk megazine), and the misnamed *Wayne's World* are testament to this. However, we can't really recommend you infringe anyone's copyright. If you do, you should be prepared for the copyright holders to get rather stroppy.

The other dodgy area is pornography. There's a plenty of this available from bulletin boards, but most reputable PD libraries won't distribute the hard stuff, usually drawing the line of topless pictures, or the occasional bit of nudity in a fantasy art demo.

## YOUR OWN PD LIBRARY?

If you want to get involved with PD, but don't fancy creating it yourself, the other option is to start your own PD library. If you want a get rich quick scheme, forget it. The whole idea is that the price you charge for the disk is no more than it costs to buy the blanks, duplicate it, advertise them and send them out. There are enough libraries that respect the system, so anyone who starts charging too much for their disks won't last for long with those for competition.

To set up as a PD library, all you need is a selection of PD disks, a disk copying utility, and your Amiga. However, if you have any plans for your library to grow from a part time hobby into a full time job, you'll have to be prepared to expand your setup to accommodate the increases in your mailouts and disk duplication. We at CU AMIGA don't claim to be experts on running a PD library so we asked four of the best Amiga PD libraries a few questions to find out just what's involved. This is what they had to say.

## THE PD LIBRARIES

The following four PD libraries were chosen for their outstanding level of service. Some are big, others are not so big, but all offer the latest PD at a fair price, with a quick turnaround of orders, which are fulfilled by return of post in many cases. How do they do it? We asked them just that.



You can do what you like with PD, if you want to include as unrefined cartoon mascots in your demo, go right ahead.



**Name: NBS PD****Year Established: 1987 (PD in 1989)****Telephone: 0983 529594****Fax: 0983 821599****Why did you start a PD library?**

Bought an Amiga, and then together with a friend, started selling blank disks and boxes as a hobby by mail order and to the local Amiga club. Started to collect demos, but never thought of being a PD library. In spring 1989, decided to give it all up, but before we did (we had made enough money from the previous two years to buy a printer, a half Mb upgrade each, and about 12 pints of lager), we put our remaining profit into one final advert. This was the famed NBS PD EARTHQUAKE! which in effect cut the price of PD in half, down to 99p. The result was phenomenal! The rest is history!

**How much capital did this require?**

We managed to get a £1,000 loan from the bank.

**What mistakes did you make in the beginning?**

The big mistake all PD libraries have made is an escalation in advertising! It's very easy to get sucked into too many magazines. PD is a low profit business, and advertising takes most of it!

**How do you promote your disks?**

Adverts in magazines, features in magazines, plus our own magazine (it's grown to a newspaper now).

**Where do you get your disks from?**

Many are sent in, some are swapped with other PD libraries, plus bulletin boards and CDs.

**How do you copy your disks?**

Using a high speed disk duplicator.

**Don't you get a sore tongue from licking all those stamps?**

Not these days.

**Do you need a big selection of disks for a successful PD library?**

Yes! You are expected to have the latest version of AmiXXX or whatever. People will always be asking for programs not in the library, so a few disks would be a big handicap.

**What makes your PD library so special?**

NBS is a full-time occupation! We are not based in a bedroom in the evening. OK, we are not the cheapest (not the most expensive either), but we are reliable, and care about our customers. Orders generally go out the day we receive them. One order that gave us a buzz was phoned in at 5.20 one evening, from the Channel Islands. 7.30 the next day he had his order on his doorstep. We also produce the most comprehensive paper catalogue. We don't think any other library has anything like it.

**Top five disks this month:**

1. Assassins games 159 (AS1 159)
2. Text Engine Wordprocessor (PB 020)
3. ASI Virus Killers (PU 460)
4. Artisoft Paint Package (E 037)
5. 1-3 Emulator for A1200 (U 743)

**Most requested disk of all time:**

No figures for a precise answer, but probably D-Copy, Venons Virus Killers or the Puggs in Space demo (A1200 compatible with 1.3 emulator).

**Name: Cynostic****Year Established: 1992****Telephone: 0203 681687****Fax: 0203 638508****Why did you start a PD library?**

To fund CD game development! However, PD took over and has grown since. We all had a massive interest in the Amiga before all this, but the library has intensified it. Quite a few of ex-Cynostic people now do amazing high end work.

**How much capital did this require?**

About £500, probably less. We already had lots and lots of disks and some equipment.

**What mistakes did you make in the beginning?**

We were too naive possibly. We accepted what people told us, often to our detriment.

**How do you promote your disks?**

Magazine reviews, magazine advertising, catalogue disks, internet.

**Where do you get your disks from?**

BBS, internet, the authors. We're one of the quickest in this respect.

**How do you copy your disks?**

Using the Amiga itself or from Diskmasher files from hard drive or CD-ROM.

**Don't you get a sore tongue from licking all those stamps?**

Yes! There have been a few nasty accidents. But I won't go into them here, that's too rude.

**Do you need a big selection of disks for a successful PD library?**

Yes! It's essential, and you must know about each one.

**What makes your PD library so special?**

We're friendly, cheap, quick, honest, love the Amiga and we have a sense of humour about it. Plus, we don't make any money from it, which is a bit unusual, some would say!

**Top five most requested disks of the last month:**

1. Virtual Dreams - "Breath Taker" (D 0305 abode)
2. The Final Frontier #7
3. Teletext 1.2 (U 0142)
4. Amiga Fax 1.4 (U 0182)
5. Zombie Apocalypse 2 (G 0224)

**Most requested disk of all time:**

Spaceballs - "State of the Art" demo (D 0241)



Hacker demos are one of the most exciting parts of the public domain, where the world's best programmers show the commercial boys how it's done, with stacks of nice sounds and graphics.

Left: Digital Dreams - one of the better examples of what VideoTracker can do for you.







### **Name of Library: 17 Bit Software**

**Year Established: 1988**

**Telephone: 0924 366982**

**Fax: 0924 200943**

#### **Why did you start a PD library?**

It started as a hobby which paid a wage to a few enthusiasts – an 'ideal job'! It soon boomed as PD became mega popular, and the company soon had to adopt a more professional stance.

#### **How much capital did this require?**

Not much initially (just a few Amigas), but now we have in excess of £35,000 worth of hardware.

#### **What mistakes did you make in the beginning?**

Too much advertising. It is possible to pass a stage where further advertising does not improve response.

#### **How do you promote your disks?**

Advertising in several Amiga publications, recommendations and features.

#### **Where do you get your disks from?**

Direct from authors, Infomel, BBS etc.

#### **How do you copy your disks?**

Professional duplicating equipment (Tracer Ghostwriting equipment) and Amigas.

#### **Don't you get a sore tongue from licking all those stamps?**

No, we use a very expensive franking machine.

#### **Do you need a big selection of disks for a successful PD library?**

Not necessarily. Quality is more important than quantity (size isn't everything you know!).

#### **What makes your PD library so special?**

Expert technical help, fast 24 hour turnaround, unequalled after sales service. Strict quality control on all library submissions. Good product range.

#### **Top five most requested disks of the last month:**

1. The Curse of Doctor Strange (3151)
2. Kiondike 2 AGA (3175 AB)
3. Imagine 2 Buddy System (3161 AB)
4. Morphy the Magician AGA (3162)
5. Overlander (3116)

#### **Most requested disk of all time?**

Jesus on Es demo (2258 AB)

Left: can't get a megabuck loan to produce a professional pig video?  
Then do it on your Amiga instead!  
Check out the brilliant Miss Cerebral to see what's possible.



### **Name of library:**

**Visage Computers**

**Year Established:**

**1992**

**Telephone / Fax:**

**0602 444501**

#### **Why did you start a PD library?**

At the time (87-89) we were paying around £3.00 per disk, and as our collection grew, we felt that we could sell them for less. Also we're demo and utility freaks!

#### **How much capital did this require?**

Not too much at first – around £300, most of which was spent on disks and stationery. Obviously things like advertising, which came later, which cost much more.

#### **What mistakes did you make in the beginning?**

Not sending in LSD's Jesus on Es demo to be reviewed, as we had it virtually on the day of release.

#### **How do you promote your disks?**

Advertising in Amiga magazines. Also sending disks in for review.

#### **Where do you get your disks from?**

BBS, Infomel and programmers.

#### **How do you copy your disks?**

We use DCopy 3.1 and FEX (a custom-written program for hard drive to floppy copying).

#### **Doesn't your tongue get sore from licking all those stamps?**

No, but we're getting addicted to the glue (not).

#### **Do you need a big selection of disks for a successful PD library?**

The more disks the better. It is also important to try to get the latest disks quickly.

#### **What makes your PD library so special?**

Being the sole distributors for the LSD legal tools from disk 152 onwards. Having the latest demos and utilities. Quite a reasonable price of £1.00 per disk.

#### **Top five most requested disks of the last month:**

1. Virtual Dreams - Love (AGA)
2. Stellar - Mindflow (AGA)
3. Complex - Real (AGA)
4. LSD Legal Tools 156
5. Rage - Maximum Overdrive 2 (AGA)

#### **Most requested disk of all time?**

Fairlight - 242 demo





# PC REVIEW

## COLONIZATION

OCTOBER 1994 £3.95

THE GRAVIS ULTRASOUND  
COLLECTION ON CD  
MICROPROSE'S TRANSPORT  
TYCOON

IF YOUR HIGH-DENSITY COVER DISK IS  
MISSING, CONSULT YOUR NEWSAGENT

IF YOUR CD-ROM IS MISSING,  
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EXCLUSIVE  
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Sid Meier  
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MUSIC SPECIAL!  
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TEST THE BEST  
• YAMAHA'S SUB-£200  
PC COMPOSER

YOUR COMPLETE GUIDE TO PC ENTERTAINMENT

## IN THE OCTOBER ISSUE OF PC REVIEW...

### Sid Meier's Colonization

It's been a long time but the follow-up to Civilization is HERE, and it's reviewed ONLY in PC Review!

### PLUS

- Why buy a new PC when you can rent? It could work out more cheaply - we explain how.
- The future of sound: we look behind the scenes at Creative Technology, the people behind the Sound Blaster
- Give your sound card the speakers it deserves - four sets of speakers reviewed and rated in our definitive test.

- Who owns who? How the PC games publishers are slowly but surely becoming part of Hollywood - a special PC Review investigation.
- Be the first to play MicroProse's Transport Tycoon, with PC Review's special cover disk extract.
- All this and a free CD-ROM on the cover, too. This must be PC heaven!

**PC Review October 1994**  
**In the shops on September 15th**  
**Reserve your copy NOW!**

**PC REVIEW**





# CD32 ZONE

The only place for news and reviews on the CD32

## NEW

What an unusual month it's been! On the one hand you have Psychosis pulling one of this year's most important games, a game that could have really shown



all the power of our favourite 32 bit console. On the other, however, we see complete levels of Mindscape's *Megarex*, a game that can really show off the power of the machine. Good stuff! This is more like it – games that show off the CD32 for what it is – not just A1200 ports or games that look like Amiga games. The CD32 is going to have some very tough competition soon. In the way of the SEGA Saturn and the Sony Playstation, and to stand any real chance of blowing these toys out of the water, we have to have a lot more than *Zoo 2* and a ported port of *Frontier*.

And it looks like we'll do it no problem if there are more games like *Megarex* coming our way.  
Simon Dillon  
Games Editor

## NOVASTORM NO MORE!



In a shock move (this month), Psychosis have announced that the much touted sequel to *Microcosm* originally titled *Scavenger* before its name was switched to the less than snappy *Novastorm*, has been withdrawn from development. Oddly enough, it has only been taken away from the CD32 platform, and all other versions such as the SEGA Mega-CD will continue as planned. The reason for this unusual move? The programmers concerned, who as all Microcosm owners will know are Stuart Sargisson, Richard Weeks and Peter Marshall, have all been moved across to develop for the up and coming Sony console, the Playstation, and Psychosis just don't

have the programmers to spare to continue work on the AGA version. Whether or not development begins again will all depend on how the machine performs at Christmas, along with how the PSX performs when it finally appears. For more information, call Psychosis on 051 709 5765

## COMMODORE CONFIRM NEW GAMES CONSOLE



Commodore UK have exclusively revealed to CU AMIGA that not only are the Amiga and CD32 set for a bright future, see our lead news story on page 16, but a new generation games console is in development and planned for release next year.

David Pleasance, Managing Director of Commodore UK, exclusively revealed to CU AMIGA that a new system is to be launched. David told CU AMIGA, "the new generation system will be launched in 1995", he also specifically avoided mentioning the CD64 previously used in, until now unconfirmed speculation regarding a potential new Amiga console.

Just exactly what hardware will be featured in this console is still unknown. However, Commodore are known to have PISC architecture hardware in their R&D labs, which is reported to feature many of

the capabilities of sophisticated graphics workstations. It's also known that any new console would be competing with the Sony Playstation, Sega's Saturn and the Nintendo Ultra 64, all of which Commodore are aware of and will surely be working to beat. Given these two facts the new generation CD32 is certain to be a killer system and capable of slugging it out with the competition. Those doubting Commodore's ability to produce such a product should remember that the Amiga was first developed 10 years ago and only now are rival systems starting to catch up with its high performance graphics hardware.

The only question remaining is timing for such a launch. Commodore's previous tactics have been to make surprise launches in late Autumn, to capture Christmas sales. Given this record it would be likely that the console would be unveiled at the Autumn ECTS trade show.

Even without the news of this new system the CD32 is set for a roller coaster ride this Christmas, with a wealth of big new titles planned for release, at the same time as one big title is dropped – see news story (left). The CD32 has a bright future.

## SOUNDS UNUSUAL

Ward Science continue their endless support for the more technical users of the CD32 with the release of three more CD-ROM data titles this month, all compatible with PC and Amiga CD-ROM units. *Sounds Temble* is the name of a double CD pack let all the budding musicians out there and unlike standard sample CDs, it features no audio tracks at all. Instead it features thousands of modules, sample files in IFF and RAW formats. Some scores, MIDI files plus all the PC sound utilities you could wish for. In a more traditional vein, they are also releasing a clip art CD by the name of *Clip Art*, which features over 650Mb of clip art in black and white, IFF, Celoured IFF bitmap, Pictops, EPS, IMG and brushes for Deluxe Paint. Finally there's a complete CD database of fonts under the name-sounding name of *Fonts*. With over 900 fonts on the CD, you'll be hard pressed to find a more comprehensive range for the price. Speaking of the price, you'll be pleased to know that both the *Clip Art* and *Font* CDs are only £9.99 each, and the *Sounds Temble* double CD pack is the extremely reasonable £19.95! For more information, call Ward Science on 0533 340832 Price £19.95



# FIELDS OF GLORY

TOUGH DECISIONS AS THE BATTLE RAGES

Has your desire for battlefield leadership been fulfilled? Or, does the prospect of another wargame leave you cold?

Now, MicroProse present *Fields of Glory* for the Amiga: a game designed to break the mould of dull simulations.

The emphasis is on action and the heat is on you to make those crucial command decisions. The rich, vibrant sights and sounds of our Close-Quarter Combat System replace the tired interface of traditional wargames. You'll find that skilful 'against-the-clock' decision making is more important than historical knowledge.

*Fields of Glory*: the fury of real battlefield action. For A1200, A500, CD-32 and IBM PC Compatibles.



AVAILABLE  
FOR A1200,  
A500, CD-32  
and IBM PC



S I M U L A T I O N

**MICROPROSE**



# Diary of a Game

PART  
**7**



While John Jones Steele has been away sunning himself in Florida, Dave Rowe has been given artistic licence with **Space Academy**. Let's see how he got on.

**D**ave can not believe that it has been a month since the last entry in the Diary. He's been so busy with the latest developments in Space Academy that he hasn't even noticed the time flying by.

'I have not seen much of the Summer, having installed blank blinds in my studio, but as I look out the leaves are starting to turn. Autumnal and the odd leaf is drifting past the window.' Very poetic speech.

John so what exactly has been taking up so much of your time? The answer is their new toy. John and I each have a copy of *Lightwave* and we are working our way through the manuals. I only wish that I could cram it all into my head in half an hour, but as it is, work on the main body of the game has to progress and only the odd snatched hour, as time allows, can be allocated to the tutorials. John is currently working on developing the

wire frame animation based upon our intro section storyboard and will include some frames in next month's entry.

'In the current version of Space Academy we are able to guide our hero around all eight levels of building one using the bright, flat coloured temple rooms.' Dave continues. 'The first two levels have finished graphics installed and, with level three nearing completion and it is exciting to see the finished game coming together. As each level is completed I send it via modem to John and he incorporates it in the next version, making minor adjustments where necessary. With such focus being placed upon close detail it is easy to feel that the overview is getting lost and out of control, but by keeping regular checks on this we can see that the direction is OK and that everything is coming together as planned.'

So with the game

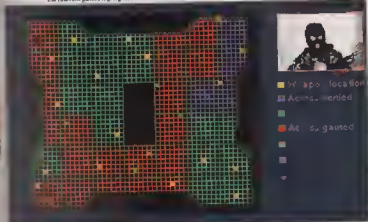
rushing towards completion, what else remains to be done? 'We still have some refinements to make, like visual puns, non-interactive sprites, clouds scuttling around making each scene look busy and so on, but these are best done when we pull the whole thing together once all the graphics are finally completed.'

The main character has been animated in all of the eight directions required. Unfortunately, once they were combined with the game the North and South directions were later crap so we have to scrap those and so them again.'

## COMPLEXITY

One thing the Stellar Genesis Agency have found is the way that their juices are increasing in flow. 'As we produce more levels the complexity of the rooms increases. In the last issue we included a level two room which had raised balcony with connected rooms that were out of view. We are exploiting this feature more and more for example the temple room from level six has four levels of balconies, one above the other. This is as many as we feel will comfortably fit the screen, considering the resolution of the sprites.'

A new shot of your laptop computer. As you work through the level, it gets mapped out with all the relevant points highlighted.







By stressing the frames and setting their perspective to match the wall, portraits in the castle are a doddle!

"As the rooms become more complex, so the puzzles grow in complexity. You can see the vital object in the room below your balcony, but there is no access to it. In order to reach the object of your heart's desire you must plot a course back through the current section of the level you are on in order to arrive in the room below. We are going to get really mean in the later levels, because you will have to work your way not only through the current security section, but also through other security sections on that level and will mainly use the lifts to visit lower levels, cross them and find another lift shaft to bring you back to the level that you were on in a position that enables you to reach the required room."

"All this would be an absolute nightmare, but we make sure that it is merely a bad dream by the provision of the laptop. All you have to do is make sure that it is continually updated by plugging it into the videowall stations on each level and recharged by using one of the infrequent power points."

## VIDEOWALL

However, the 3D elements of the game aren't the only thing that need work. "As we have said before, the laptop contains mapping information of your progress so far, areas as yet inaccessible, location of visuals, arms, ammunition etc. When you plug it in to the videowall you get a more detailed, full colour view of the floor plan or any floor plan already visited. The video that was playing at the time is reduced to picture in picture top right. With all this wealth of information at your fingertips you can backtrack on your progress and pick up an alternative route with a reasonable amount of certainty, well maybe of reaching

your destination safely. As the videowall is pinning your laptop you can

same way as the wall textures, is grabbing them, reducing them in scale, shearing them and finally colouring them and framing them. With these in place it is possible, for the later levels, to include them in cryptic clues as to the location of invisible floor switches. I do not think that we should say any more about it for now or we will give too much away.

"Whilst working on building one we feel that it is important to keep the whole thing looking fresh and so I tend to only do a few rooms at a time before switching my attention to another aspect of the

building which is a castle with six floors. We are giving this building a Medieval feel with an interconnected minstrel gallery running throughout each level to the extent that it is possible to explore a floor without ever leaving it. The wall textures were grabbed with a video camera appropriately enough from Aberystwyth Castle. The stone blocks in the straight grab were too large so I picked it up as a brush and halved it, applied sheen, and stamped it down over the entire page. A translucent blue rectangle applied over the page then produced the basic background wall. This is then embellished with tapestries, flaming torches, oak beams, suits of armour, hidden passages and all those other fiddly bits that give the right atmosphere, coupled with, anachronistically, mobile guardian deoids on rails who can suddenly appear, glide past you taking a pot shot or two, and disappear."

## AND SO ...

As John's holiday is fading in his memory as fast as a Florida sunset (something that even eight rolls of holiday snaps can't help), he really knows that he is back to work now that he is has to change all the masks in level one to take account of all the changes that Dave made to the graphics whilst he was away. Of course Dave did this, not through any sense of malice you must understand, but through artistic integrity you understand.

Below: room seven is nearing completion



Just a small section of the castle model, but one of the later levels. Just check out the amount of detail in this map.

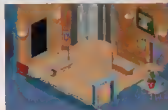
decide your best route as the map shows you current direction of escalators as well as all the other necessary information. This leaves you mainly the unexpected to have to deal with."

## ARTIST AT WORK

Dave is, in many ways, a traditional artist, and is bringing his arty background to the game. "In producing the final graphics for the rooms in building one we chose to include a large number of framed pictures. These were produced from my large televisual collection of tapes, slides and reference books and treated in much the

Template room where all the work on the colour begins.

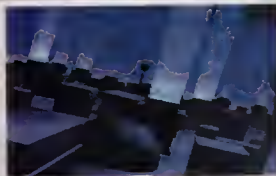
game, like animations or the other buildings. Whenever I feel that there is a danger that the rooms might begin to look the same I like to switch to working on the second





# CYBERWAR

SCI, formerly The Sales Curve, are bringing a 3D paradise to a CD32 near you very soon. Tony Dillon gets a sneak preview and goes goggle eyed.



The enormous Cybercomplex is a dark and frightening place to be - something that SCI have managed to capture extremely well

**T**he Lawnmower Man has done Virtual Reality a lot of damage. The tale of John and Cyberbabe gave so many people the wrong impression of what VR actually is that when anyone ever goes near a VR helmet, they can only be disappointed. SCI were one of the companies who realised this, and snapped up the Lawnmower Man license immediately, and used it to create one of the most visually stunning CD-Rom games yet.

Unfortunately it never made it to the Amiga or CD32, but that wasn't too much of a problem because apparently it wasn't a very good game, suffering quite badly from Dragon's Lair-lus, a game syndrome whereby all playability is removed and replaced with fancy graphics

## 3D DREAM

For the past year, however, the Southampton-based SCI development team have been banging away on a sequel of sorts to this game

Something that takes the staggering visuals of the original, yet adds a whole new level of playability. Cyberwar is the result, and it continues the story of the original game, where you take on the role of Doctor Angelo, battling against the might of

The tower is the place where Doctor Angelo goes to die, although in this high resolution shot, he's not going without a fight.



There is a very different kind of game room, all of which require an element of skill, strategy and a mental planning

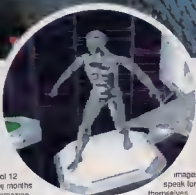
the twisted Cyberbabe within the cybercomplex of the VSI mainframe computer.

It's taken a team of 12 people the last twelve months to come up with the amazing screenshots you see on this page, using a combination of 3D Studio on high end IBM PCs and full Silicon Graphics workstations, rendering enough 3D footage to fill no less than three full CDs! As you can see, the images are downgraded slightly for the sake of compression but by enlarging the size of the pixels, SCI are able to run 256-colour animations at high speed, and still leave enough room for a game.

## CRYSTAL MAZE

And what a game it is! Take the Crystal Maze, stick it inside a weird metallic world and you've got Cyberwar. There are dozens of combat, skill and agility rooms, all of which need to be solved if you are to make it to the end of the game. The Lawnmower Man - The Game was considered by most to be far too linear, something that SCI have taken note of this time around, and as a result you can now play the games in any order you like!

At the end of the day, though, what's really going to sell this game is the look. Still screenshots are never going to show you the fabulous direction or the smoothness of the animation, but they are going to make you want to rush and see it for yourself! That's why we're letting the



Images speak for themselves

We'll have a full review of Cyberwar very soon indeed. Watch this space. **CD**



Here's the real head guy of the game. He'll rip you in half before inflicting, although that could be because he has no eyes





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What do you get if you take an idea for an interactive tune, and then wait five years to complete it. Gremlin know the answer, and are willing to whisper it in Tony Dillon's ear.

# LITIL DIVIL

One of the first things anyone ever did when the optical medium (CD Rom/ Laserdisc) was first used on a computer system was attempt an interactive cartoon. In case you need reminding, that particular game went under the name of *Dragon's Lair*. The world was wowed by the fantastic graphics and sound, but when anyone actually tried to play the thing they tended to walk away quite

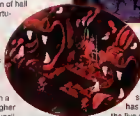
disgruntled. The problem was that it just wasn't playable at all, being more a case of remembering the required joystick movements for each screen rather than actual interaction. Since then there have been various attempts at interactive cartoons, but almost all of them have failed.

Now Gremlin Graphics are giving it a go with *Litil Divil*, a game that has been in production longer than most of you have had an Amiga. In its time it's been a floppy disk based maze

game, then a PC/CD-Rom based puzzle game, then a combination of the two, and now it's made its way onto the CD32, and to be honest it's the closest to a fully interactive cartoon yet, but that doesn't make it a perfect game by any stretch of the imagination.

## GARLIC BREAD WITH CHEESE

You play Mutt Divil — a young but enthusiastic denizen of hell who has been unfortunate enough to be selected for the annual Mission Impossible to travel to the bowels of the Underworld, through five levels of sheer... well, hell, and then return with a pizza to feed the higher members of the council. Every year a likely candidate is sent to get the food, but not once has one returned with a 'deep pan meat plate, hold the spicy pork oh and could I have some anchovies on that' delicacy. As you can imagine, the aids are getting a little disgruntled about this, so anyone who doesn't return is threatened with a fate worse than death. Unfortunately, if you don't return, then you probably are dead,



but then again this is hell, and so it all works out somehow.

Enter Mutt — the man (of sorts) with a mission. Essentially he has to travel through the five enormous levels of the underworld, collecting all the cash he can find along the way and solving puzzles in all the rooms he can find. There are fifty of these rooms in total, and jolly entertaining they are too. As a rule, solving one of them will either open up another section of the mazes, or give him an item which he will need for a later room. Whatever the case, there is one rule that always comes into play when

It's remarkable the kind of things you can do across 17 hell.







Shades of The Hobbit, so you try and shoot a dragon's head.

you enter a room, you are never told what it is you actually have to do. In many cases, the solution will be painfully obvious from the start, but in others you really need to work through it to get there. Take the Mermaid room for example. Here you are shown a mermaid with an evil glint in her eye sat in a large oyster. In front of her are three rather vicious looking piranha fish. She raises her hand, and a mystical symbol appears. Jumping on the fish also produces a symbol, so it's quite obvious that all you need to do is jump on the right fish to produce the same symbol as the mermaid shows you to complete the screen.

In a more obscure vein however, is the large snake's head that spits spiders at you. This is right at the start of the game, and you can't solve it right away. No amount of stamping on the spiders will complete the screen. Instead, you need to get hold of a can of insect repellent, which you spray into the snake's eyes to destroy it. OK, so you've got no way of knowing this the first time you enter the room but once you've been to the shop, you should know all about it.

### SHOPPING AROUND

Sorry, didn't I mention the shop? Why did you think you had to collect cash as you ran around the maze?



(At the end of the level you have to pay a toll to get to the next level, but that's not the only reason to collect money.) At the start of each level you'll find a shop with just some of the items you'll need to get through the puzzle screens. You don't actually know which screens require which objects, but due to the nature of the rooms you don't actually need to know. You can only use the right object in the right room, so if you don't have it, nothing will happen when you press the blue button.

Lut Divi is an incredible looking game, but with all those years of development behind it, it should be. The animation is smooth and characteristically, with lots of fun spot animations and effects thrown in. Every action has a separate animation and sound effect, and after hearing Mutt hum to himself every time he picks something up, I soon managed to drive the office to distraction by humming the same tune every time I picked something up.

So far, it all sounds marvelous, but unfortunately Lut Divi isn't quite as fantastic as it first appears to be. The problem really comes down to the size of the levels. Each level is an enormous maze that doubles over and under itself, and contains tunnels and bridges over different parts of the maze. As there are only about ten puzzle rooms per level, this means that there is a hell of a lot of walking around to be done, which can get very boring very quickly.

Also, the hazards in the tunnel screen just can't be seen most of the time. The view window in the tunnel is quite small, and the sprite of Mutt running into the screen is quite large, making it hard to see anything at all. That plus the fact that the whole thing scrolls quite quickly means that more often than not you run into spikes and holes rather than manage

to avoid them. This soon becomes frustrating. I can tell you.

### LET DOWN

So Lut Divi has finally appeared, and to be honest I feel a little disappointed. It has come so close to being a great game that it's a real shame it has been spoiled by being too big. Not that there's anything wrong with a game being big. It's simply that if you are going to stretch something out over a thousand screens, then you need to make sure that there is enough game in there to fill a thousand screens. **CU**



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GRAPHICS

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Great looking game, but

large to the point of

being completely empty.

OVERALL 79%



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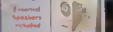
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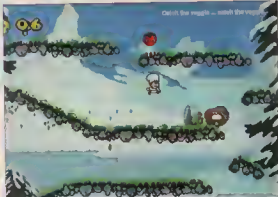
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## OUT TO LUNCH

MINDSCAPE £29.99 OUT NOW

**I**t's a hard life being a world class chef. 'French' here Pierre Le Chef probably has the hardest time of all, coming from a land where more often than not the vegetables have had their patches and run arid, leaving poor Pierre with nothing more than his bare hands and an empty kitchen with which to prepare his world famous. Gosh! Surprise (the surprise is, it's only garlic). So what does he do? He heads out into the wild with a net and a bag of flour, and sets about collecting some of these wild fruit and veggie edibles.

In this port from the Super Nintendo, Mindscape have created an extremely simple and addictive platform game. In the same way that Bomback was simple and addictive, you are the small chef with the net who has to swipe all the food running up and down between the levels. Of course the food doesn't actually want to be caught and cooked, and will make a run for it the moment they see Pierre, so he needs to use anything else he can get his hands on to stun them from a distance, such as a bottle of Tabasco sauce with which he can breathe fire, or bags of flour which he can throw over them. Once he has enough veg in his net, he can drop them in the large cage at the bottom of the screen, ready to be cooked.

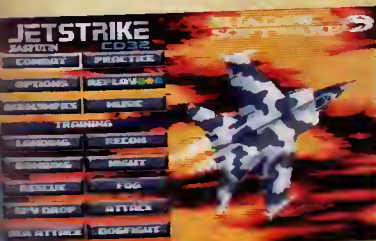
Out to Lunch is an incredibly basic platform game, with very little in the way of new or innovative features, but that's probably why the game works so well. There are few enhancements from the A1200 version, with the exception of multiple fire button compatibility, but then the A1200 version was strong enough in it's own right. A highly playable, if somewhat unspectacular game, you'll definitely have some fun with it though.

Tony Dillon





# JETSTRIKE



**Shadow Software's blast from the past has just appeared on CD32, thanks to Rasputin. "Hmm", says Tony Dillon.**

Imagine a game that lets you fly almost every combat and stunt aircraft ever devised. A game that can place you in almost any battle situation. A game where you need

The main screen shows you just how much variety there is in the game, offering the chance to join in a dozen different areas before throwing you into battle situations.

almost no knowledge of flight itself, and can concentrate on pure arcade action. A game with such simple controls that you can become addicted immediately, and never want to put it down again.

## A TIP OF THE HAT

Such a game is exactly what Shadow Software must have been hoping to produce when they began work on

As you can see, the graphics are less than impressive and unfortunately they don't get any better when the thing starts moving...

incredibly well though, and the constant flow of updates to the program shows that there is a very active group of users out there.

The main menu at the start of the game is a good indication of what you can expect from the product, and there are a hell of a lot of choices, from practicing the various aspects of the game (combat, bombing, photo recon runs, dogfighting etc) to playing out full campaigns.

If you haven't seen Jetstrike before, then you won't be familiar with how it works. Essentially it's a side on scrolling shoot 'em up, but with unusual controls. Instead of moving the plane around as you would expect to with an eight way controller (up moving the plane up, down to go down and so on), the control is actually rotational, with up on the joystick rotating the plane clockwise, and down rotating anti-clockwise. It takes a little getting used to, but it's a control method that works fine, apart from the fact that when flying to the right, pushing up makes the plane dive (as it would in real life), whereas pushing up when you are flying left makes the plane climb.

## SHUDDERING

It has to be said that the game looks fairly awful. Small, indistinct sprites roam around a hundred and one identical landscapes with a jerkiness that's inexcusable. The whole thing

just judders and shakes all over the place, which quite destroys first impressions. Unfortunately, it's an impression that stays with you as you continue to play the game.

The real problem with Jetstrike is that its look and feel is very dated. The small sprites, with the poor scrolling and limited gameplay appeal make it a little archaic.

Although there have been improvements for the CD32 version — extra sound and music — there is really nothing about it that I can honestly recommend.

I remember when games like this were all the rage. *Heiner Attack* and *Tornado Low Level* are two of my most favourite games. There was something about them that was just so exciting. Flying a high speed jet skillfully through an intense battle situation was quite an unusual thing in those days, and even though the graphics were simple and the game play simple, they quickly became classics. That was however, in 1986 and things have come a long way since then. Graphics have become a lot more sophisticated. Single frame, quarter pixel scrolling has become the normal thing to see, along with rendered aircraft and 256 colour images.

Jetstrike from Rasputin, sadly, is a game that belongs in a museum.

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CONTROLS	JOYPAD
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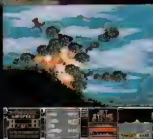
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# WIN A DREAM LIFESTYLE!

**T**his marvellous adult advertisement, *Dreamweb* is almost finished, and to celebrate Empire Software and Creative Reality are about to offer you the home entertainment package of, if not actually a lifetime, a very long period indeed. Yes, yes YOU, the lucky person holding this magazine, could actually win a full home entertainment system and be the envy of your friends!

How about this for a prize? The Sunnyside model of the one entry we drew from the slightly unpleasant sack that's been growing roots in the corner of our office will win a new 14" colour TV, a state of the art User-Friendly Amstrad video recorder and a full satellite TV decoder system, complete with unobtrusive black mesh blind dish!

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What's more, if you don't want to get up to turn it off, it's got a built-in sleep timer to turn itself off at a particular time!

But what are you going to watch on it? A favourite video perhaps? We thought so, which is why we're throwing in an Amstrad UP30 video recorder. This twin speed VCR (standard play and long play, for getting twice the time from your cassettes) is just packed with features, including VideoPlus+ video programming, blank tape search and automatic head cleaning, so you get the sharpest pictures imaginable.

They do say that there's a lot of sex and violence on satellite TV, and *Dreamweb* itself is a game that tackles sex and violence, now you'll have a chance to make the comparison between the two with this complete satellite TV package. First, you choose the TV and video, the SH0350 features twin disk inputs, so you can receive from two satellites at the

same time, and a built-in Videocrypt decoder slot, which you'll need if you want to subscribe to the Sky TV package.

To win this magnificent prize, just answer the following questions.

## 1 What is the name of the main character in *Dreamweb*?

- a) Ryan
- b) Gavin
- c) Bobby

## 2 How many people make up Creative Reality?

- a) 2
- b) 5
- c) 47

## 3 How many people do you have to kill in *Dreamweb*?

- a) 4
- b) 7
- c) 1,557,304

When you have your answers ready, drop them on a postcard along with your name and address and send the lot to: *Catch Points Here I Come*, CU AMIGA, Pictory Court, 50-52, Farringdon Lane, London EC1R 5AU.

## RULES AND REGULATIONS

- 1 No employees of Empire Software, Creative Reality or EMAP Magazines are eligible, so keep your hands off the video Andy.
- 2 The Editor's decision is final, and no correspondence will be entered into unless you fancy a play-by-mail game of chess.
- 3 Closing date for all entries is 20th November 1984.
- 4 Entries will only be accepted as postcards not bin liners.
- 5 Unusual pictures of Pinkie will be treated and hung on the wall.
- 6 For the last time, leave them alone, name Andy!



SCREEN  
SCENE

Goodness, do we have some games lined up for you lot this month. They're so hot they're flaming. So you better not touch. Just give yourself an optical feast with this little lot.

- 53 ZONKEO  
53 CYBERGAMES  
53 MEGARACE  
54 JUNGLE STRIKE  
POA EUROPEAN  
TOUR  
MIGHTY MAX  
MUTANT LEAGUE  
HOCKEY  
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TION PART TWO  
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84 HELPLINE

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100% and a game's worth is important. We hardly know them around. But if a game gets an 80% it's completely outstanding.

## FIRST IMPRESSIONS

A blink. A flash of light. In a fraction of a moment you have taken in everything around you and made your decision. Your opinion has been formed, and it'll take something really special to change that. I bet you never realised that first impressions could be so exciting.

ZONKEO  
Psygnosis

**THE GAMEPLAY:** Zonkeo is a very simple puzzle game presented in a totally non-puzzle way. You play a little guy trapped in a building, who has to escape by building a bridge to the exit of each room. To do this, all he needs to do is push blocks around the forced perspective 3D room until they drop into the holes around the exit tiles.

There are obstacles all over the place, of course, such as locked pillars, immovable blocks and other holes which impede your progress along with all other items to slow you down, of course.

**BEHIND THE SCENES:** Zonkeo has been designed, drawn, coded and completed by the mysterious team known as Flatline.

**WHAT'S NEW:** The vanity of blocks in the game is something a little special. Everything has its own weight and characteristics, which you have to use to your best advantage. Things might be stuck on glue, or incredibly heavy or even made of ice. To make life easier, there are various things dotted around to help you shift blocks, such as tractor beams and teleporters.

**FIRST IMPRESSIONS:** It looks like it's going to be a lot of fun. The only game I can think of that was anything like this is the old Hewson game

Anarchy, which was incredibly addictive at the best of times, and it looks like this could be just as exciting. We'll have a full review next issue so as Show Taylor would say "keep 'em peeled".



## CYBERGAMES

Cyberpunk Developments

**THE GAMEPLAY:** It's a best 'em up but is being touted as the best and most violent Amiga beat 'em up ever. Taking a lead from popular games like Streets of Rage 2, Mortal Kombat and even the classic C64 title Barbarian, and mixing them all together, this could well be the game to knock the console market down to size.

**BEHIND THE SCENES:** This is the first title from new Swedish team Cyberpunk Developments: a two man team made up of Björn Fogelberg and Johan Lundin, based in the wilds of Angelholm. They haven't worked on anything else before, so there's nothing really at all to report.

**WHAT'S NEW:** The mixture of kicking and punching with swordplay make the game far more like the Palace game Barbarian than anything else, but the fact that every

successful blow earns you money adds an element of Eltman's. The one new point is the inclusion of a Cybershop, where you can upgrade your weapons, as well as buy more energy and some missile objects too. You also aren't limited to fighting on the ground hand to hand. There's a money bar along the top of the

screen you can climb across, as well as being able to summon mystery weapons, which stick out of the floor and walls and seriously damage your opponent.

## FIRST IMPRESSIONS:

We've seen an early playable version of the game, and while the actual control remains to be refined the basic game isn't bad at all. A lot of thought has gone into the amount of moves each player can do, along with the variety of ways they can fight. It remains to be seen whether or not a play-by-play game comes of it, but we'll let you see when we review it in the next issue or so.



I WILL MAKE IT REAL QUICK AND EASY FOR YOU. BOY. AND REAL PAINFUL TOO...



# EXPRESSIONS

## MEGARACE

scope

**THE GAMEPLAY** A simple racing game offers a variety of landscapes in and around the major city. Like *The Running Man*, the computer is one of the most popular TV shows of the time, and contestants have to go against each other in the hardest street gangs ever seen in a car or death chase, which will be watched by millions of people. You've got a choice of eight different vehicles to race in through the 16 tracks in what's promising to be the best computer racing show ever!



**BEHIND THE SCENES:** Megarace has been coded, drawn and designed by Cryo, the French team who are also working on *Lost Eden* for Virgin Interactive Entertainment. If Polygraph need a challenge to the 3D rendering crown, these are the people to watch.

**WHAT'S NEW:** The visuals are absolutely unbelievable. Like the 3D0 title *Iron And Burn*, all off the back of the tracks, including the track, are rendered and spooled off the CD as you race. Only your sprite and the other cars are generated by the computer, which makes for an incredibly realistic looking game. At all, however, has to be the into sequence, where Lance Boyle, the host of the show, introduces the programme with you as the start.

**FIRST IMPRESSIONS:** Stunning. We've seen a single car race around all of the tracks, and it has to be said that the whole thing looks incredibly realistic. Like *Iron And Burn*, and the 3D0 title *Novastorm*, it has that 'must have' feel to it. If you are looking for a game that gives you a reason to buy a CD32, then this could well be it. Look for a full review next issue.

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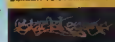
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# OCEAN UNLEASHED



WIP

**T**hey call it the 'fourth quarter' in the software business: we call it the Christmas build up. The time of year when les grands fromages of the industry roll out their big guns to do battle for your cash at the one time of year they are sure you actually have it. And looking at these games it seems as though Ocean are going to pocket a fair chunk of those readers

Despite rumours of a 'bad year' for Amiga games, and Commodore's recent predicament, we haven't really seen a dire shortage of software this autumn. There certainly seems to be enough in development for Christmas too, even if it's not as much as previous years. Adding to all this good news Ocean have announced a development and publishing deal with Electronic Arts which has more than doubled the amount of products on their Christmas release schedule — a deal which included *Jungle Strike*, *PGA Tour Golf*, *Mutant League Hockey* and *Shaq Fu: Throw Dicks TFX*. Into this cauldron along with the Rollerblading conversion *Sketchin'* and an original Ocean platformer *Mighty Max* and you've got the ingredients for success.

## INFO

Price: £25.99 (Amiga)  
£27.99 (CD32)  
Release Date: December

Would you involve Chris Eubank in a Tennis game? Hmm... it was my first question when I realised that the Shaq of the title is in fact no other than Shaquille O'Neal, of Orlando basketball fame. How was I on this wise London lad to know that he is also famous as a martial artist and rapper too apparently? Good for him. And good for us too because it means that yet another 'beat 'em up' is winging its way towards machines this Christmas. I really shouldn't need to describe the basics of the game to you, but poslety's sake I will. It's for one or two players. No surprises here. You choose one of eight fighters including Shaq. Nope, none here either — character has indochinally tuned special moves and there are lots of locations to fight in, all around the world. Nothing strange here either and there is a tournament mode or simple one on one fighting. There go *Shaq Fu*. Different eh?

For all Amigas and CD32, *Shaq Fu* is still in very early stages of development but then it's only barely ready on other formats, via EA, at this time. Ocean are working full steam ahead with the licence and are determined to get it out by Christmas. On name alone it promises to be a big one, and with no sign yet of *Mortal Kombat II* for the Amiga, starved beat 'em up fans will no doubt lap it up.

**With eight full price Amiga games planned for release by Christmas of this year Ocean Software are taking their role as the UK's largest publisher seriously. Alan Dykes examines the evidence.**

## MUTANT LEAGUE HOCKEY

### INFO

Price: £25.99 (A500/A600)  
£27.99 (A1200)  
Release date: October

Have you ever watched ice hockey on TV? Pretty violent eh? Well this is nothing like it — it's even worse. Of course it doesn't matter if these poor creatures get mangled up after all they're just mutants, right?

*Mutant League* for those who haven't seen it on other formats, is rather like *Brutal Sports Football* except better. In fact it's a pretty good ice hockey simulation, full stop. It contains 25 teams which consist of athletically gifted but deranged lunatics and in play, against either the computer or a friend, you can pick up in full manner of dangerous objects to throw at the opposing team. In time honoured ice hockey fashion it's not just a matter of playing the puck, *Mutant League* also involves fistfights and several other violent stuffs too. And just to make sure you don't miss out on anything there is an action replay facility, allowing you to see that last goal or maiming incident.

EA have a superb reputation for their sports sims and hopefully this will come across in the conversion process. *Mutant League* is an ideal two-player game and the A1200 version should be fast enough to prove to the console bulls that the Amiga is still a force to be reckoned with. More news soon.

## PGA EUROPEAN TOUR

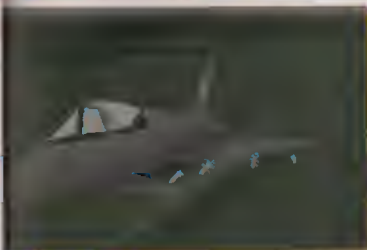
### INFO

Price: £25.99 (A500/A600)  
£27.99 (A1200 & CD32)  
Release Date: October

'Tweet, tweet Silence. Ah yes, that's what I love about golf, the peace and quiet of it all, the sense of well being and control of one's self with your surroundings. *PGA Tour* has always offered me this sort of escape, but usually in America. Now thanks to Ocean and EA I can enjoy 10 holes in my own back yard, well, so to speak — in Europe. The courses available include ones in England (Wentworth), France (MGG Paris) and in Spain (Valderrama) and they have the weather conditions to match the sort of climate each country has. As usual there are pro contenders to slog it out with and a variety of challenges, including sudden death and match play.

Once again an enhanced graphics AGA version will be available for not much more cash (certainly not much more when you compare the price to other formats) and all versions will have updated sound effects to add a sense of reality.





Just one of the advanced fighters you are destined to try in TFX, if you're lucky enough to own an A1200 (here's a test run at that).

months new and a final release date, (late November [that's 1994 folks]) has finally been confirmed. For those not alive last year when the PC version swept the charts, TFX is the flight sim to end all flight sims. The title stands for Tactical Fighter eXperiment and the game gives you the opportunity to fly, in combat missions even what are still topical regions of the globe, one of three fighter-bombers. Only one of these, the F117A, better known as the Stealth Bomber, is actually in production at the moment, both of the others, the Eurofighter 2000 and Lockheed F22 do actually exist in prototype form, as aircraft of the future.

It's a similar sort of scenario to *Wing Commander* only much, much better in terms of both graphics (AGA only graphics), control and realism. Because of

the AGA graphics and the need for speed TFX will only be available for the A1200, which should also avoid *Wing Commander's* dealthly slow pace.

There promises to be over 5 million square kilometre of bitmapped landscapes, with 120 pre-set missions, in five war zones. Somalia, Colombia, Yugoslavia, Libya and, er, the South Atlantic? TFX promises to offer something for all types of players with options to play an 'arcade' style game where you don't have to worry too much about the planes themselves just enjoy some (hopefully) fast paced action, or a full military simulator ie, a more educational flight sim where a working knowledge of the real dynamics of aircraft flight is necessary.

We hope to have either a review or a more in-depth preview of TFX next month but if it ends up anything like the PC version, TFX will be the most significant Amiga game of the year. It's also likely to be the most speed and memory hungry – and most expensive.

Below, flying at night.  
Below left, is that a transport plane I see before me? A Lockheed Galaxy by any chance?



Control will be as difficult as you want it to be, with up to 100 per cent full flight simulation mode or easy, 100 per cent.





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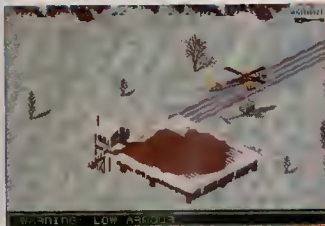
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**INFO**

Price: \$25.99 (A500/500)

\$27.99 (A1200 &amp; CD32)

Release date: October

Tyants of the word beware! Electronic Arts invented a new game with *Desert Strike*, and have followed up the original on *Mega Drive* with *Jungle Strike* and now *Urban Strike*. OK, so we're still behind them but, well, who cares? It's coming. *Jungle Strike* is simple. Destroy some more buddies. Lots more in fact. The son of the evil dictator you should have eventually killed in *Desert Strike* is back in action in the jungles of South America and seeking to avenge the death of his father at the hands of the imperialist American scum.

Needless to say you play the imperialist American scum, piloting an imperialist American scum Commando attack helicopter, packed with imperialist American scum as to ground missiles and cannon. You've also got the choice of three other modes of transport including *Stash Fighter* and *honorcraft*. The action takes place at night, during the day, in mountains, over the jungle and over the sea. There are nine campaigns, each of which has a minimum of six levels. Due out for all formats in late



There is a wide variety of scenery spread out over the nine campaigns in *Jungle Strike*. With a pair of night missions in each campaign, that's a lot of terrain to cover before you beat the bad guys.

**MIGHTY MAX  
INFO**

Price: \$27.99 (A1200 only)

Release date: October '94

Not much is being released about *Mighty Max* at the moment, even though the planned release date is only just over a month away, but it is apparently a platform arcade with a cute, branded character based on a top-selling American toy. A one or two player game with simultaneous on-screen control and action and a choice of three characters, *Mighty Max* will be A1200 only because it's not possible to pack the graphics and gamemplay info in an A500 according to an Ocean source.

**SKITCHIN****INFO**

Price: \$25.99 (A500/500)

\$27.99 (A1200)

Release date: November '94

*Skitchin* is an arcade roller blading game that involves winning races against ruthless opponents on the wild streets of urban America. Anything goes in the quest for success, including tagging lifts from cars, performing stunts and knocking your opponents with various street weapons, collectable on the route. At the end of a race, if you're in the money, you can upgrade your kit.

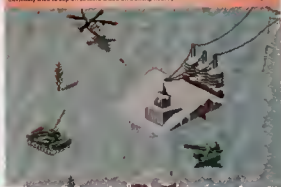
Another console conversion, *Skitchin* looks like a rather unusual combination of fighting and racing and although I personally didn't like it very much on the other formats I'll reserve judgement until I see the final version of this one.



No! Danger Zone? What ever gave my Amiga that idea? There are only two SAM rocket launchers in the immediate vicinity. Only two Aggs!

October it will feature AGA enhanced graphics on the A1200 and CD32. The control method promises to be the same as the previous version and the animation is smooth. Unfortunately I haven't been able to play the Amiga version at first hand yet, but from what I can see so far it's at least as good as the Mega Drive version.

Excuse me, but this doesn't look much like a jungle, does it? These silly fly boys have obviously tried to slip off as Mord Bisco on a skiing holiday and run into trouble on the way.





# BUBBLEGUN

It's got a cute name, it's a cute main character, it's got some cute animations ... and we've got an ugly games editor to review it.

games is that they've been damn good. With the possible exception of *Bubblegun*, that is.

## TRAPPED

The story behind *Bubblegun* is a simple one. You are a small crocodile with a gun that can fire bubbles (hence the inspired name) who is trapped in a castle and has to find their way to freedom. Quite why they are trapped in a castle, or why they are carrying a large gun, or indeed why they are trying to escape isn't made clear at any point, but then who really takes any notice of game plots these days?

What you are left with is a very basic platform game, where you begin somewhere in the middle of a four-way scrolling maze. Dotted around the maze are a variety of objects, such as points bonuses, energy bonuses and time bonuses but the most important things to look for are sections of keys. You can carry three items at once, and there

are three sections to each coloured key, so it isn't too much trouble to build up a complete key. Once you have the key built, all you need to do is find the chest with a coloured lock that matches it. Open the lock and fruit and gems fall out. If you're really lucky, a block with 'Exit' written on it will appear. This is the key that opens the level exit, and is the one thing you are looking for.

## POINTLESS

Possibly the most pointless thing in the game is the *Bubblegun* itself. When you start the game, you have the gun and three pellets for it, and more pellets can be collected around each level. Once you've fired all three of your pellets, the gun is rendered useless, and you have no other means of attack, so you have to be very sparing in your firing of this weapon. The problem is that the bubbles that you fire travel almost no distance at all, so you have to be quite close to the thing you're firing at. Also, you have no way of telling which creatures are affected by the bubbles and which are not, so you don't actually know when you're firing whether or not you are going to waste a pellet. Mind you, if the shot actually connects, and the enemy you connect with is one that can be caught, the creature is enclosed in *Bubblegun*, and you can jump on them to burst them (yuck!) and collect the bonus objects that they leave behind.

The controls are a little too fiddly for my liking. The character slides along rather than have any real contact with the ground, and while it's nice to have a smooth animation of the character turning to face the other direction when you

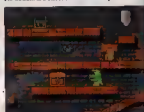


With a spring in his step, Croc fires out that key, once again, run out of bubbles

move the joystick, it does take time to perform the animation which slows down the responsiveness of the game.

*Bubblegun* is a weak little, that lacks the class and polish of any of the recent platform games. I have to say avoid this one, simply because it just isn't worth the money. **CU**

The block at the top is a key segment, and at the bottom is a chest that needs a key



There is a trend in the Amiga platform market that is more evident now than ever before - cuteness. *Bubble N Squeak*, *Ruff N Tumble*, *Brian The Lion*, *Kid Chaos* and now *Bubblegun*. In the good/bad old days, the emphasis was on fantasy art, with games like *Shadow Of The Beast* and *Barbarian*, and now that the Amiga market has grown up we are bombarded with small characters with wild haircuts and garish outfits, firing oversized weaponry at oversized enemy sprites that, let's face it, don't look like they could hurt a fly. The only saving grace with those obviously console inspired

The crocoder eyes say it all. This is one crocodile who has no idea what he's going on.



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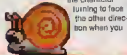
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GRAPHICS \*\*\*\*\*69%  
SOUND \*\*\*\*\*71%  
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Just doesn't compare  
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Final Copy II (upgradable to Final Writer as you needs grow) and Final Writer are the only word processors that give you **PerfectPrint™** - a unique printing advantage giving silky smooth industry standard Adobe™ Type 1 or Nimbus Q scalable outline fonts direct to any printer (even dot matrix and ink jet), in both landscape and portrait. Others use a restrictive and unnecessary jumble of different fonts with complex driver programs for configuring to various printers. The launch of Final Copy II introduced **FastDraw™** - a special set of structured drawing tools for constructing lines, borders, arrows, circles etc. directly on the page.

### "What the Papers Say..."

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### Final Writer: extending innovation...

Now, no others are just starting to add similar features, saying they're 'revolutionary'. Final Writer extends the innovation further with **FastDraw Plus™** - adding even faster and more functional options (including a new male command). Final Writer Release 2 is again leading the way with the introduction of **TouchTools™** and **PowerBar™** technologies. These features give the user a definable area at the top of each document window where up to eight "one touch" button strips can be configured. Each strip contains easily customizable sets of functions giving instant access to all the major commands/functions - with a simple click of the mouse! There is even a set of buttons allowing "one touch" selections of font style and size plus variations including Plain, Bold, Italic and Underline! It's no wonder we've received top reviews, ratings and awards from all the leading magazines...

### The Highest Accolades...



### Final Copy II Release 2

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cropped) with the highest print quality. Text can also be printed over graphics.

It's features like these that explain why there are little professional magazines, with 200+ pages, that are produced entirely with Final Copy II Publishers, and many others, have quickly discovered that.

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## NEW Final Writer Release 2

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with both the new **Touch Tools™** & **PowerUser Bar™** 'one-touch' technologies. Simply clicking a button means you can define, change and save such things as the Paragraph Styles (ie. Font, Font size, Text Position, Bold, Italic, Underline etc.) and Layout Options (left, right, centre or justified, bullets, line spacing, indents etc.). The options you have through single button selections are nothing less than remarkable! Indeed, one magazine heralded these as 'the closest thing to Microsoft Word to appear on the Amiga!'. Also uniquely, Final Writer can export, scale, crop view on screen and output structured Postscript EPS clip-art images (we supply a hundred free with the package) to any printer (≥2mb system RAM required). And... if you own a Postscript printer: Final Writer is the only word processor with a set of output options including scaling, crop marks, thumbnails, and half-toning. Combine features like Aliases/Macros and

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Impressions have come up with one of the most original ideas for a business simulation ever devised.

Tony Dillon dons

his fedora and starts smoking cigars ...



# DETROIT



**"G**et up, everybody's going to lose their seat. You've got to lose your mind in Detroit Rock City" OK, so perhaps a very tenuous link with an old KISS song isn't the best way to start a review, but as it's has been swirling round and round in my head since I started playing the game, I just needed to tell someone about it.

After the success of Bullfrog's *Theme Park* this buzzword at the moment is business simulations. Out the door go light sims and combat sims and in comes accounts, marketing and producing consumer goods. Impressions already tried this a while back with their airline management simulation *Air Bucks* and didn't do too badly with it, but this time around it seems as though they have really hit the nail on the head.

## BIGGER AND BETTER

*Detroit* is all about empire building (as opposed to *Empire State Building* - he he). More specifically it's about building an empire from selling cars à la Henry Ford, but there's a lot more to it than just that. You begin the game with one sales office, one factory, a small amount of money and

the plans for a single car - the Model One. From this position you have to create the automated modern world, which isn't easy considering you actually start in the year 1908 when the roads are full of horse-drawn carriages and the car is a completely new concept. The overall aim is to make it all the way to the 21st century, developing new hardware and custom options as you go along,

making more money all the time and generally trying to keep ahead of the other three car manufacturers, all of whom are fighting for their lead position too. I know it sounds horrendously complicated, and it seems like you'll just have too much to do at once, but bear with me while I explain.

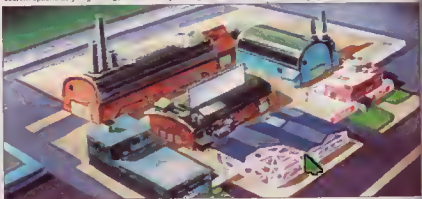
There are really only five screens for you to work in. The first one you'll come across is the administrative office, where all your hiring and firing is done, among other things. In order to get things moving you will need staff and it's here that you recruit technicians and assembly workers (provided there are enough available) and assign them to various tasks. For example there are seven major areas of design in a car (bodywork, engine, suspension, cooling, brakes, luxury items and comfort items) any of which you can assign technicians to design. Obviously, the more technicians you assign to a task, the faster you will get results. Similarly

you can assign assemblers to any of the six production lines in a factory and you will receive a larger return from having more staff on the line. However, having loads of staff costs a lot of money, and you have to make sure you have a genuinely good product to be able to support such high overheads.

## FROM A HAT

Once you have your office and factory up and running, you have to come up with a product. For the first year you aren't going to be able to build anything new, simply because your technicians will need that first year to start developing new kit for you to play with. As a result, your first year in business is all about making loads of cash, and to do this you have to make and sell cars. The first real decision is where to sell the cars. As the game has been made as authentic

Your factory and production plant in all its glory. Click on the buildings to enter





tic as possible: you already know that there is little point in trying to sell your wares in places like South America and Australia in 1908, but there is a market in the now developed parts of the United States and Northern Europe, so that's where you open your sales offices. Then you have to set your marketing strategies, deciding how much you are going to spend in each sales area on advertising in magazines, newspapers, billboards, TV, Radio and any other media that might become available as time goes on. When selling any product you need to build awareness, so be prepared to spend quite a bit on advertising.

The last thing you need to do is set the price of the car, and to see how you should be pricing it, you need to go back to the admin office and check your office reports. Here you can view almost any aspect of the game, from how much profit your competitors are making to the estimated market demand for your cars worldwide. You can also find out exactly how much your opposition's cars are selling for in various parts of the world, and adjust your market strategy accordingly.

## COWBOY BUILDERS

The real secret of the game, however, has to be the car design itself. Don't worry though, you won't need a degree in automotive engineering. At the start you are given a set of blocks to work with, from body shapes to the various internal parts of the car from which you have to try and build the most exciting, inspiring and must-have vehicle ever seen. Once you have created your ideal car, you can choose the colour, give it a name and build a prototype, which you can then test for speed, braking and road handling at the end of which you are given a percentage score for the car – the higher the better.

It all comes with the standard quality of Impressions packaging, with two game manuals, a cheat card



Your headquarters and workshop are always on the lookout for new designs.

to get you going plus a concise history of the motor car through the years, just to give you some idea of how the market has developed in real life, which you can apply to your game strategy. It isn't often that a company puts this much effort into their packaging, and it really does add to the quality of the game. Three cheers, I say.

Detroit looks great, as you can see, with whitecolour images making up all of the screens. Unfortunately, the game doesn't have the animations of the PC version, but because the only part of the game that actually uses this is the testing screen, which isn't completely necessary, the talking is not much of a problem.

## EASE OF USE

Playing Detroit is actually very easy. The layout of the program is logical enough to leave you with little reason to refer to the manual. Everything is accessible from the mouse or keyboard, and there are more than enough shortcuts to get you to what you want with the minimum of effort. One particularly nice feature is the



Your own office in Acme has the nicest sofa in the game.

fact that when you click on the 'next month' icon a screen appears with a checklist of all the available things you can do in the game, with ticks by all the things you have actually done. This serves as a handy reminder for things you may have forgotten to do, so that you don't end up losing the game simply by being forgetful.

Detroit is an excellent game. The nicest thing about it is the fact that Impressions have taken a topic which should inspire many, and presented it in a way which is

satisfying enough to keep you playing while simple enough to appeal to the masses – not just the strategy buffs. If you want a game that will take up your days like very few others can, then this is the one to get. **CU**

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RELEASE DATE	OUT HOW
GENRE	STRATEGY
TEAM	IN HOUSE
CONTROLS	MOUSE, KEYBOARD
NUMBER OF DISKS	2
NUMBER OF PLAYERS	4
HARD DISK INSTALLABLE	YES
MEMORY	1MB

GRAPHICS	*****82%
SOUND	*****71%
LASTABILITY	*****85%
PLAYABILITY	*****86%

“ Accessible yet deep strategy game. Very involving. Very entertaining ”

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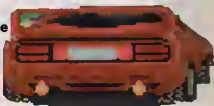
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# TOP GEAR 2

LET HER RIP!!

Gremlin have held the Amiga racing game crown for some time now but will they hold on to it with a console conversion? Tony Dillon gets behind the wheel and goes "brummmm". (Actually he can't really drive).



Believe it or not, those dots in the middle distance are actually the other cars in the race.

If there is one mainstay that Gremlin Graphics is famous for it has to be the racing game. Supermerc, Lotus Nigel Mansell and others have always been the secret of their success. Most people thought that Lotus 2 and 3 were the definitive Amiga racing games and even Core Design's superb Jaguar XJ220 couldn't topple the Sheffield racers from the top of the pile. Which is why I find it so interesting that they should feel the need to convert a SNES racing game, and not a particularly good one at that, to the Amiga. Still, my lot went to reason why. (You're right, it's 10 out on with the review! - Ed)

## STANDARD START

As you may have guessed, Top Gear 2 is a racing game, and to be honest it's a pretty standard one at that. You simply have to race around the world in a league against 10 other

drivers through various weather conditions, with the aim of coming first every time. Naturally, your car goes faster than all the others, yet it seems to have tremendous difficulty in gripping the road on a corner, and so you have a far harder time actually completing a lap of any given course than the other drivers on the road. Sound familiar?

As well as receiving championship points at the end of each race, you also receive an amount of money reflecting your final position. This cash is accumulated over a number of races, and can be spent before each one on adjustments and improvements to your car.

For example, you can swap up the engine, or add better tyres (or Wet Tyres for races in the rain), and if you like you can even give your car a respray, free of charge, for those of you who don't like the default colours or just fancy a shocking pink race car. There are three levels

for each upgrade and as usual the best costs the most. As you can probably tell by now, this game isn't exactly packed full of surprises.

## HINDSIGHT

Playing this game, you realise what it was that made the Lotus Trilogy as popular as they were - smooth animation and a nice, solid and responsive feel to the car. Although the update of the track and objects is running in a frame most of the time (it comes down to about three frames when rain or any other conditions are overlaid onto the screen), the game just doesn't look anywhere near as smooth as its predecessors. This is really down to the fact that the scaling on all cars is terrible. You are given no real sense of distance or perspective simply because the competition go from being the same size as your automobile to dots on the horizon in about five steps which just isn't acceptable these days.

Also, this game just doesn't feel right. The car is quite slow to respond most of the time, and you end up fighting the controls more often than not, where you should actually be in tune with the game itself. I know it might sound like a load of hippy nonsense, but the key to this kind of game is when you forget about how you're controlling the game and just play it intuitively, or, use the force as it were.

At the end of the day, Top Gear 2 is a real let down. It's an adequate racing game, with no frills, but it really just doesn't match up to Gremlin's glorious past. For those of you who have never played a racing game before it's worth a look. If, however, you've already played games such as Lotus or Jaguar XJ220 - avoid. **CU**



Before each race, you are shown the weather.



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TEAM	IN HOUSE
CONTROLS	JOYSTICK
NUMBER OF DISKS	2
NUMBER OF PLAYERS	2
HARD DISK INSTALLABLE	YES
MEMORY	1Mb

GRAPHICS	+++++64%
SOUND	+++++71%
LASTABILITY	+++++73%
PLAYABILITY	+++++70%

Considering its forerunners this is a bit of a disappointment.

**OVERALL 71%**





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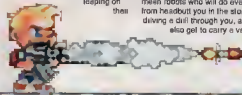
What's this? Renegade are releasing another platform game, and claiming it's the best ever? Tony Dillon investigates with a raised eyebrow.



You don't want to go up there, mate. After all, there are two coloured marbles and a weapons power-up on that platform on the right.

I know that I've said it before, but this game has to win the award for having the strongest plot ever devised. Ruff (who is the young fair haired boy of the title) enters a fantasy world after playing near a mischievous rabbit woman. When his marble rolls down a tunnel, he hops at the chance to be transported to another world to battle with the evil Dr. Deslinsky and his Tinhead army. Armed with a variety of weapons, Ruff battles through four worlds and 16 levels to defeat his enemy. Weird or what?

As you can tell from the screenshots, or if you've already taken a sneaky look at the game box in the verdict panel, *Ruff N' Tumble* is a platform game. What you won't be able to tell from the screenshots is that it's a platform game in a class of its own. It doesn't look like it should be on a console. It isn't even remotely cute in its handling of weapons. It's extremely violent! You don't kill enemy sprites purely by leaping on them.



heads, no there's a lot more to it. But more on that later.

#### LOW FAT SPREAD

The game is spread out over four worlds: forest, caves, factory and Dr. Deslinsky's Castle, with each world being made up of four huge levels. The aim on each level is always the same, however, which is to collect a

large amount of marbles of all different colours, a set amount of which must be picked up before the exit to the next level is opened.

Naturally enough, when you reach the end of the world, you have to go against a giant sprite in the guise of an end-of-level monster. There are coins dotted all around the levels too, a hundred of which guarantees the player an extra life, along with all manner of other bonus objects which just increase the player's score.

This is nothing really new here but what does make *Ruff N' Tumble* special is that it is an extremely playable and polished product. Jason Perkins (code) and Robin Levy (graphics), have managed to create what could almost be described as the perfect blend of platform game action and a shoot 'em up. Like I said, you don't jump on the bad guys, and you don't get to be cute at any point. What you do get is to go up against some fairly mean robots who will do everything from headbutt you in the stomach to driving a drill through you, and you also get to carry a very large



He may have a cute haircut, and perhaps his cheeky grin doesn't give you the impression that he's a bit of a killing machine, but Ruff rears with a determination that many find hard to match.

gun. But that's only part of the fun.

When you start the game, you have a fairly weak weapon. Collect a couple of power-ups and you puny little pop gun can be turned into a rapid firing machine assault rifle with enough kick to saw a house in half. But that's not the good part. The good part is when

you get to collect some of the other weapons in the game, such as the laser pulse rifle or, best of all, the flame thrower. I can't explain why, but there is something about swinging a stream of fire around the screen, wiping out everything in sight that is just so satisfying. (I'm getting worried about Tony - Ed.)

As well as the basic one hit robots to kill, there are also more dangerous enemies, like the Blinky with his flunder/mace (pictured) or Tommy with his Tin head.





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# GRAHAM GOOCH'S CRICKET

**Last year, Audiogenic swept the board with their first cricket sim. This year they're going to do it again, according to Andy Nuttall.**

The thing that really strikes me about cricket titles is that they're attempting to simulate a game which is quite slow and tedious to watch. While I was always fond of playing cricket back in school, since then I've found test matches only marginally more exciting than snooker in the telly watching stakes. Every time it's on I find myself vocally urging the bowler to hurry up, especially the allegedly fast bowlers who spend weeks sauntering back from the pitch before getting a good run up for the bowl.

Playing Amiga cricket, though, is potentially much more interesting. Even the poorer cricket simulations which have appeared on the PC scene over the years have been superb to the point that non-interactive TV commentary seems banal because you have some control over what goes on. A year ago, Audiogenic released *Graham Gooch's World Class Cricket* a game which was widely acclaimed for combining a decent game engine

along with believable graphics and sound effects. Always a winning combination, I find.

Now, the same company has released a special Test Match edition of the game, to coincide with, er, the Test Match between England and South Africa (which is probably over by the time you read this, incidentally). The improvements are few, but the game presumably warrants an update anyway simply because this is a new cricket season, bringing in new names, faces and, of course, the South African test side, so long out of world cricket.

*Gooch Cricket* has a comprehensive database of world cricket, pulling in all sorts of data which doesn't just include player's names, but also their abilities and strengths – so you quickly find out which batsman is the strongest, and where to place the fielders for the best results. For this bit you really need a working knowledge of cricket, but the computer does help you along

## TEST MATCH EDITION

which means that even beginners soon pick up the basic rules (silly mid-offs, bowling maiden overs, that sort of thing).

The Test Match edition, as well as being more difficult than the original, also includes a long list of actual matches which are saved half-way through so you can continue from where they left off – a bit like "What happened next?" from *A Question of Sport*, except you get complete control. Some of the most popular test matches (apparently) are saved, including the recent West Indies vs England in Antigua (where Brian Lara scored his record-breaking 375 runs), and the perhaps less well-known England vs Australia in 1902. Yes, well.

Thankfully, even though Audiogenic has built a good emulation, the actual in-game graphics are great. Huge sprites form the bowler, batsmen and in-fielders, so the game looks like a con-op rather than a computer aim, which should satisfy the less cricket knowledgeable among you. *Gooch Cricket* really is cricket for the masses, because it has something to satisfy everybody, and only some pretty lengthy disk loading to work against it. As a one-player game this Amiga puts up quite a good fight (depending on the quality of the teams being played), but like most sports games, it's best played with two people.

And hey, even the presentation's good, so while setting up the many options in-between matches isn't

exactly a joy, it's not as frustrating as many games of this kind. I can't pretend that *Gooch Cricket* will convert non-believers to cricket, but even if you only have a small interest in the game, *Gooch* will have something for you. **CU**



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OVERALL 84%



### CHEAP UPGRADES

If you already have the original *Graham Gooch Cricket*, it might be worth giving Audiogenic a quick call about a cheap upgrade to the Test Match Edition. We're not promising anything, but mention that you read the review right here in CU AMIGA and you just might get it for, ah, £15 or so.



# WORLD CUP USA 94

## US GOLD £25.99 OUT NOW



the selling points of the game is that (as the flash across the box proclaims) it contains a free souvenir wallchart, in which you can fill in the results of the matches you finished watching a few months ago. Still, nobody buys a game purely on the strength of the name, so let's brush all that aside and take a look at the product itself.

Naturally, it's an arcade soccer game, along the lines of everything from *Kick Off* to *Microprose Soccer*—a field that has been more than adequately littered for recently with titles like *Empire Soccer* and *Storm Soccer*. Unfortunately, it just doesn't come anywhere near as good as either. *Empire Soccer* is fun, *Storm Soccer* is fast, *World Cup* is bordering on unplayable. The control method is awful, with your players scooting



Oh dear, not only is the game too late for the World Cup, it's not very good either

about at such a high speed it's almost completely impossible to do anything



The crowd don't look very happy either and, would you believe it?

with the ball. The ball movement is jerky and nonconvincing, and there is almost no sign of computer intelligence at all. A bench test showed that the computer players did the same thing

from kick off five times in a row—three diagonal runs and then a shot that goes nowhere near the goal.

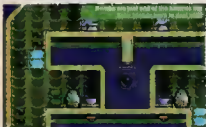
The worst thing about the game is the menu system at the start. Sneaky football games have evolved far enough to have a menu that you can use without referring to the manual. Maybe *US Gold* see this collection of meaningless icons as a bit of a problem, or they wouldn't have devolved almost all of the manual to explaining what it is. Basically, *World Cup* is a big let down.

Tony Dillon

42%

# GULP!

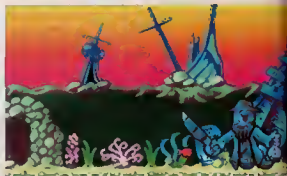
## ICE £25.99 OUT NOW



fish. To capture the essence of *Gulp!* in a nutshell, it's Lemmings underwater, but with much more interaction with the background.

The aim of each level is to get a certain number of fish from the inlet pipe to the exit, while avoiding everything if possible. The player is allocated a certain number of 'morphs', which can be applied to any fish you care to mention. By selecting one of

these special abilities and clicking on a fish, you can change them from their usual physical appearance to everything from walls to lorpdes. These different abilities are used to get past various obstacles within the game, and of



course you only have just enough of each to actually get you to the end of the level. Tactics is the name of the game here.

The levels are large, and fairly intricately laid out. Most people will find *Gulp!* incredibly hard to play for the first hour or two, simply because there is so much to watch out for,

Could it be that the great of Dave Jones himself is out to stop you?

and so much going on at once. Thankfully, you are able to pause the game and scroll around the map, so you shouldn't find it too much trouble planning your route. It's just the execution that's the hard part.

*Gulp!* isn't a bad game at all. Although it sometimes can get very confused on screen, there are some really nice ideas in there. It won't hook everyone. In fact, I don't even think it will hook everyone who liked Lemmings. You'll either love it with a passion, or you'll play it once and never look at it again. It's a time-honored statement, but I think with this one you're really going to have to try before you buy.

Tony Dillon

73%

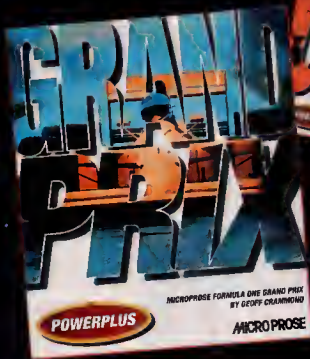




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# ARMOUR-GEDDON 2

## CODENAME HELLFIRE



**It's been a long time coming, but Andy Nuttall reckons that the all-new *Armour-Geddon 2* was worth the wait. No, really.**

**W**hat is it about *Avatar* and *Goddan 2* that I find so madly addictive? On the one hand it's a kind of extended fight sim, using all the known MicroProse style techniques to make you believe you're actually in the air (or rolling along the ground should you be commanding one of the many ground craft available). On the other, it's sheer lust of nerve and reflexes, as you attempt to juggle between controlling one craft and up to five others simultaneously. Not easy. And on the oh, third hand it's packed with strategy as you attempt to rid the world of the disgusting Hellfire

cunning, though, and has control of a whole army of fighter planes and ground attack vehicles, hell bent on stopping your mission. However, if you can beat these enemies and gain control of their bases, you will capture extra resources (and technology) all of which will help you create a bigger and much more efficient rocket.

The vehicles at your disposal aren't difficult to control (except the helicopter, obviously), and I reckon it's possible to complete the game using each vehicle separately. It's definitely advisable, though, to multi-task and get used to controlling more than one at the same time. Some of the

aircraft solely to defend it against enemy attack.

Longer journeys can be set via a series of coordinates on the main map screen. The craft will then begin moving, and make its way towards your marked destination. Although the vehicles carrying valuable cargo will be armour plated, you can place guns and other weapons on them so that if they do happen to get stranded in the middle of the desert, at least they re-



One of the most manoeuvrable tests to set around the course – take your chopper to the skies!

not a sitting target waiting for the enemy to come along

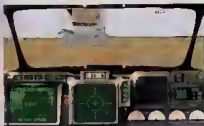
## FITTING THEM OUT

Each of the vehicles can be equipped with a variety of weapons and support kit. In addition to the usual list of lasers, there's a range of missiles and nice technical add-ons like night sights, cloaking devices and teleporters.

Of course, as with all the best games of this type, you're not just handed these weapons on a plate. In fact, most of them are unavailable at the start of the game: instead you have to plough money into the inventions screen, enabling your scientists to busily invent new equipment as you progress.

The enemy is not passive though it has an intelligent strategy for closing in on your base, knocking you out and saving Helthre. This is where your strength as a strategist and tactician is tested. For the whole game you need to finely balance your attention between defence and attack, in a way those familiar with *Dune 2* will recognise. Except, of course, *Armour Goddon 2* is played out in excellent first-person 3D.

*Amour-Geddon* 2 is one of the most difficult games I've ever played, but also one of the most enjoyable. I haven't been tempted to burn the midnight oil to finish it, because I think that's a long way away, but for me it's a game which is nice to dip into.

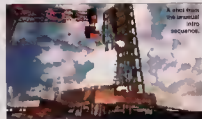


Taking out a mountain with a missile? Well, it's all-out war isn't it?

It's the future, you see, and Hellfire is an intelligent defence satellite which once threatened to cloak the earth in a nuclear shroud. At the last moment just before it pressed the metaphorical 'red button', it malfunctioned, and the Earth Defence Network (EDEN) breathed a collective sigh of relief. Now, though, it has begun its countdown to doom again, but this time EDEN, and you, are determined to be ready for the onslaught.

**WHIRLYBIRD**

The idea behind *Armour Gerdon 21s* is to build a rocket which can destroy Hellfire before it does more damage. At your disposal you have a number of air and land craft, some capable of fighting, some carrying cargo. Somewhere you have to use all of your resources to mix together all the available components from all around the planet, and create a rocket which could just save Earth. The Hellfire's

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MEMORY	1M

GRAPHICS	+++++++85%
SOUND	+++++81%
LASTABILITY	+++++89%
PLAYABILITY	+++++87%

**A bit like juggling plates, only fun.**

**OVERALL 87%**



# VFM



**BUDGET**

**Psygnosis are on the budget rampage this month, as Tony Dillon discovers when he tries out a little summer madness.**

## COMBAT AIR PATROL

**PSYGNOSIS £12.99 OUT NOW**



Just a single frame from the glorious trap sequence. *Combat Air Patrol* is one of the best presented flight simulators ever.



Flight simulators are a funny thing sometimes. Take *Arbuz* for example. Extremely popular in some quarters and totally shunned in others. The reason? It's just too realistic for its own good.

Then take something like *F/A-18 Interceptor*, which was just as popular to others for completely the opposite reason.

*Combat Air Patrol* was an attempt by Psygnosis to blend the arcade action of one with the realism of the other, and a surprisingly successful attempt it is too.

Basically it's a very fast, very smooth simulation of a multi-role combat aircraft

in a battle situation – no surprises there. You get to take part

in a variety of missions spread over a campaign, taking out a wide variety of targets with a myriad of weapons. Excitement abounds as you soar over the landscape puffing almost impossible turns and end humming tunes from *Top Gun*.

*Combat Air Patrol* has nothing particularly new, but it is extremely playable although I have to say I doubt the feasibility of it. A fun flyabout, and worth getting hold of if you don't want too much of an aeronautical challenge or a flight sim that's overly realistic.

**80%**

# WALKER

**PSYGNOSIS £12.99 OUT NOW**

DMA came up with one of the most bloodthirsty arcade games ever when they, with the help of Psygnosis, released *Walker* to the waiting world in February of last year. Coming soon after the release of the first *Robocop* movie, the idea of a large, super destructive walking robot was fairly fresh in most people's minds, but they never pictured something like this – a 40ft tall beast that can fire in all directions, and has gone a little haywire. The army are sent in to take it out, and the player, as *Walker*, must defend himself.

It is an extremely playable and addictive game and has been quoted as being 'A fast and frantic blast that won't disappoint.' The attention to detail is magnificent. Every tiny sprite is superbly animated, and the cumulative effect is one of overload – the game is just stupendously violent.

One thing that most people will find confusing, though, is that you need both the mouse and the keyboard to play the game – the mouse moves the gunsight and the keyboard actually moves your walker back and forth. It all works a lot better than it sounds and before you know it you'll be blowing the little guys out of helicopters faster than you can say "Die in your beds, you English piggies. Ghnarp ghnarp!"



Stripping through the city streets, the 40ft high walker causes chaos and destruction wherever he goes.



Using up your guns, you proceed to blow away the little guys. If you're one of them, you can walk on them instead.

**84%**

# WIZ 'N' LIZ

**PSYGNOSIS £12.99 OUT NOW**

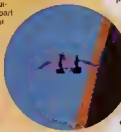
Psygnosis really struck gold when they released *Wiz 'N' Liz In The Frantic Wabbit Woodse* last year, turning it into an unexpected multi-format smash hit. Take a very simple platform game format – one where the two main characters just have to run around a horizontally scrolling, wraparound map, collecting objects. Now make the graphics small and unappealingly cute, and then make the whole game incredibly fast, and you're somewhere along the way to creating a near perfect arcade game.

The plot is as strange as they come, the tale of a wizard and a witch, who bring their pet rabbits with the fervour of RSPCA activists. Unfortunately one day a poison they were creating went slightly wrong, and all the rabbits vanished, leaving *Wiz* and *Liz* depressed and lonely. Getting their furry friends back paves the way for a two-player split screen action. At the start of the game you'll have to collect ingredients for poisons, then, as the game continues, you'll find yourself doing anything from catching bags of bunnies to collecting letters from the alphabet that float

oddly above the ground.

If you haven't got *Wiz 'N' Liz* yet, then you obviously weren't paying attention when the original reviews came out. It's a great game! So now's your chance to go out and grab yourself a copy, well, cheapish. Do so!

**91%**





# GLOBDULE

PSYGNOSIS £12.99 OUT NOW



Glob, the little cutie, who we find he can hang upside down without looking the slightest bit scared

shows here can't show you is the sprite's fluid animation. When he hits a surface, his 'spells' slightly before returning to his original shape, he also pulls strange expressions, hangs from things in odd ways, and has dozens of other cute movements.

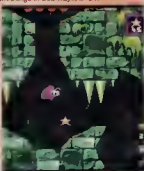
When Psychonosis set out to do a cute game, they do it with style. Just look at *Wiz N Liz* or *Lemmings* to see how attention to minute detail pays off, giving these games tons of character.

While Globdule certainly has bags of character, in my opinion it needs something else too: a hook to make me want to play it all the time. Not that there's anything very wrong with it. There just isn't really much to it that's exciting or addictive. Having said that, Globdule is still worth playing especially at this price, but there are better games around.

76%

Globdule is a game about a small blue blob who is charged with a mission to collect lots of, er, things. That's about it really. No, I'm sure there is more to it than that: Glob is a sticky blue blob, who searches caves and other atmospheric locations in search of gems, sweets and cakes. Yes, that's the full story. I know there wasn't much to the plot.

Glob is a capable little chap, able to leap large distances and stick to any surface, with a healing disregard for gravity. What the screen-



If you do



This is the strangest scene before the pattern makes everything go horribly wrong in the game.

THE HABBITS WERE HAPPY.



## PRIME MOVER

PSYGNOSIS £12.99 OUT NOW

If there is one thing that Psychonosis have never really managed to do, it's come out with a good motorcycle racing game. Games like *Red Zone* and *Prime Mover* always showed bags of promise, but when they appeared, they just completely failed to deliver. Take *Prime Mover* for example. Coded by Interactivision—the people behind *The Naughty Ones* and based loosely on *Super Hang On* and all other games of that genre, this third person perspective racer (where the player views themselves from behind) has the player racing all over the world, on a variety of similar looking tracks with different back drops, using a selection of different persons and a choice of bikes.



At the start of the game, you have a choice of which of the nine bikers you want to be. I like the one with the mustache myself.

If it sounds marvelous, and in fact it first glance it doesn't look that bad, but when you start to actually play the game, all sorts of problems start to occur. For a start, your bike doesn't really seem to grip the road while the track itself is simply centred on screen with your bike weaving around all over it. This unusual viewpoint means that control is difficult and you really can't judge where you are on the road when it comes to corners. Sure, it is all very fast and smooth, but that counts for nothing when the game itself just isn't any fun to play.

46%



# WIN A MONTH'S FUN!



**S**o I've been reading VFM again have you? Hmm. You've seen how to blow away all the little guys in *Walker*. You've read excitedly about how to take Saddam out with a multi-role combat aircraft in *Combat Air Patrol*. You've giggled at the messy exploits of *Globule*. You let your head spin trying to orientate the world in *Bob's Bad Day*. You've got out of breath just reading about the high speed scrolling of *Wiz 'N' Liz* and *Prime Mover*, and now you've got your cash ready to rush out and buy these magnificent games.

Well hold your horses. Five of you could actually win a complete set of them. *Pygnosis* are feeling so nice and friendly this month that they've decided to GIVE the things away. Yes, you could be one of the five lucky winners to get a complete set of the games featured in this month's VFM delivered directly to your door by *Pygnosis*, personally. Probably.

All you need to do is answer the following three simple questions, which are relevant to some of the games reviewed on the previous two pages, and then send your answers on a postcard to

'Pyggy Psenation', CU  
AMIGA, Priory Court, 30-32  
Ferringdon Lane, London  
EC1R 3AU.



1. What was the name of the walking robot in *RoboCop*?

- a) Barney
- b) ED 209
- c) Ed Perkes

2. What is the name of the programming team behind *Bob's Bad Day*?

- a) The Bump
- b) The Lid
- c) The Dome

3. What kind of vehicle do you ride in *Prime Mover*?

- a) A motorcycle
- b) A Thundersly Invacar
- c) A Roller Skate

There, that wasn't too difficult, was it? So get cracking

## RULES AND REGULATIONS

1. The editor's decision is final, and no correspondence will be entered into.
2. The closing date for all entries, apart from those sent from the Isle Of Wight (only joking) is 28th October 1994.
3. Entries will only be accepted on postcards or the back of sealed envelopes.
4. No member of *Pygnosis* or ENAP Images may enter this competition.
5. There are to be no amusing rules in any CU AMIGA competitions.
6. Apart from number 2, which is quite funny (according to Tony).







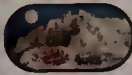
# VALHALLA

## AND THE LORD OF INFINITY

PART

2

In part two of our complete solution to *Valhalla*, Lisa Tunnah guides you through the second level of this great adventure game.



**W**elcome to level two, territory of the shaman. In the first room operate the floor tile with a hole in it and take the ew chicken. To open the door put the chicken on the grill, cook it and then feed it to the stone beastie.

Hunt around this section of corridor until you find another floor tile you can operate. Take the key from under the tile and open the door round the corner. Pull the lever then enter the room where the Shaman of Time bers your way. Take the small tile and operate the floor tile, under it is a strength potion.

Go back to the previous room, drink the strength potion. Pick up the urn and get the chest key that lies behind it. This key fits the chest in the room where you started, so go there and pilage and plunder to your heart's content, you should now be the proud owner of the book of hours and a wind charm.

Put the stick in the hole

What could be under that broken paving stone? Try it and see!



which is nearby, operate it to open the door to the room where the Shaman of Impurity is lurking. Put the book of hours in the fourth dimension and take the witch, there is another lever in here that opens a door to a passageway, this is a shortcut that will prove useful later on.

Put the watch on the altar next to the Shaman of Time, if you give Shaman the wrong objects they tend to get cross. After receiving the watch the Shaman allows you into the room behind him. Take care though as the door slams behind you. Pick up the silver key and melt it on the grill, put the liquid metal on the key stone and take the new key that fits the door.

Find the room this door conceals, inside you will meet the Shaman of Holy Trinity. Operate the floor tile and take the chest key that lies the chest in the room of the Shaman of Time. Take the tankard and fill it with ale from the room below. Put this on the mould and present it to the Shaman of Impurity. You can now walk safely past him.

Find the operable floor tile and take the next cold potion, drink this and take the ice. Put it on the stove and the eye of heaven is revealed, put this on the sundial where it is exchanged for the Stone of Leo. Put this on the lion's head to be rewarded with the sun symbol which when placed on the deactivation stone engraved with the same symbol allows you to remove the first magic ring.

### CHASM CRAZY

Head for the room filled with chasma and put the ring on the first altar. This disappears so you can take a door key. Find the door that it fits and operate the floor tile that is hiding a chest key. Put both the levers and return to the room where the ale is located. Take the ashes and the chest key. Put the ashes on the



Who says we never give you enough help. Not only are we helpful enough to tell you how to get through the second level of the game, we'll even show you the code to get to the level!

flame of the phoenix and take the wooden cross that appears in its place. Put this on the bible in the closest room to you and take the gold cross.

This is just what the Shaman of Holy Trinity always wanted and he is so pleased that you're allowed passage into the room beyond. Grab the Gem of the Four Winds, the small tile and put the red gem on the periculus that has trapped you, there

are two floor tiles to operate, find a chest key and some blood.

This key fits the chest in the room where the Shaman of Impurity lives. Take Arthur's potion and the door key. Open the corresponding door to find a broken stick and the third small tile. Travel back from whence you came and put the stick on the glue to fix it. While you are here put the small

Here, same line and some music! What should I do next?







ties down to make a path across the gaping holes. On the other side open the chest and take the gem that's inside. Operate the floor tile and take the wooden symbol.

Find the hole that the stick fits and use the gem to dispel the porcupins. Take the silver stick and operate the floor tile to take the Rock of Selene. Next, find the right hole for your new stick, then pull the lever.

The door slams shut behind you so put the blood on the sacrificial fire to make a lever appear, pull this to escape. Before you leave, pick up the chest key.

This key fits the chest in the room where the Shamen of Holy Trinity lives, take the liquid metal and another wind charm. Place the wooden symbol on the soft stone to make a mould, add the liquid metal and take the gold symbol. This fits a deactivation stone, you can now remove the second magic ring. Put this on the next altar in the pit-filled room, pick up the pound note, put this on the stone of change and enter the next room.

Onrik Arthur's potion and take the sword called Dros (sold backwards), leave the other one which spells Fragile.

Pull the lever to gain access to the room beyond and place the sword on the chest so you can cross safely to the other side. Put the werewolf teleman in the water of silver light and take the cres-

cent moon. Present this to the Shamen of the Moon.

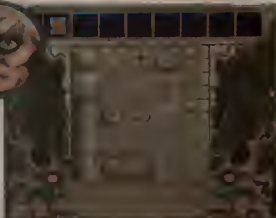
Inside the room he was guarding find a gem then find the hole that your green stick fits and operate it. In this next room retrieve a money spider and pull the lever which opens the chest in the room where you found the Silver of Light.

Put the money spider on the Altar of Affluence and take the gold bar which the Shamen of Wealth requires. In this next room there are four silver keys, before taking one read the book under the floor tile which tells you which key to take, it is actually the key in the north-west corner, this fits a door which allows you to steal the last wind charm.

Put the wind charm on the weather vanes to gain access to a small tomb, place in here the gem of the four winds and take the gold symbol. Put this on the corresponding deactivation stone to disarm the device protecting the third magic ring. Place this on the last altar in the room where you disposed of the other magic ring.

### THE HOLY GRAIL

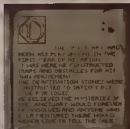
Traverse back to the room where you left the sword, remove from the now open chest the magnet and the wind charm, before you leave this room pick up the sword. Put the magnet on the altar next to the metal box, you can now take it and



"It's a suicide," the Prince tells you in his cheery way, but whatever does it do? Can you figure it out?

put it in the sulphuric acid to reveal its contents. Inside is a blank parchment. Place this on the ink and read the writing that appears, as this is a suicide note, place it in the flames of ruin, you are now the proud owner of the Skull of Death which should be placed in the water of resurrection, take the Immortal charm and put it in the Immortal fern, you now have in your possession the gold symbol which deactivates the device that protects the holy grail.

Fill the holy grail with ambrosia



and present it to the Shamen of Immortality, now walk past him and place the sword across the hole pick up the key to the last door and the end of the level. Tune in next month for the solution to level three. (2)









# Adventure Helpline



## VAMP

**Can there be anything more dangerous than a vampire with an attitude problem? Deadlier than the male, Vampyra returns to sing her siren's song once again.**

### WAXWORKS

Please could you tell me how to get into the tailor's shop so I can get a disguise in the Jack the Ripper section of Waxworks, because I keep getting arrested whenever I try to go in there. M. Sutcliffe, Glasgow.

*This game involves dirty work in dark alleys, so I hope you are up to it. The first thing you must do is pick up the rope which is to be found behind the Horticulture Store. Find the spot next to where the dog barks by the barrel. Go west down Barn North. Enter the doorway and look in the barrel to find the rope. Return to the alley by turning east and moving four steps. Turn left and enter that doorway. Use the rope on the lantern then lower yourself into the open window.*

### CRUISE FOR A CORPSE

I've got problems playing Cruise for a Corpse. The clock keeps sticking at 9.10 although I think I've tried everything. I've talked with everyone I can find (Suzanne, Tom and Julia) about everything possible in my inventory. I have this piece of paper that I found in Niklos' study and a Charter Bill. Is there one special item I have to find to get time moving again? Marc-Rene, Ebach, Germany.

*I heard of a crucifix which nullified a clock. The poor thing had to eat a whole packet of lexatons just to pass the time after that. This game has a number of annoying faults that make it more difficult than it need be. The first of these*

*faults occurs right at the beginning where you are stuck. Take the note and show it to the barman. I can't remember exactly what the difficulty was, but most people found that an awkward thing to do. As I recall the game's controls are very clumsy and 'showing' the note causes problems. Once you have done this, the barman will give you a table belonging to the priest and some information which you can use to talk to the others about.*

*While I have your attention, I'll also tell you that there are times when you must not use the quick map method in order around the shop otherwise you will not meet people when you need to. You must also pay close attention to the clock on the wall when you finally find it.*

### LEISURE SUIT LARRY 5

I have a video recorder and some blank tapes from the recording studio and I've just flown in from New York on a plane. I can't get the ladies at reception to speak to me and I don't know how to call a taxi to take me into the city. What do I do now? Darren Lack, Bedfordshire.

*In Britain you simply have to speak, and people will know from your accent whether you are important or not. In America it's different - only money talks. If you want to get some attention on the US you have to flash the cash. Stand in front of the VIP lounge and show some gold credit card (found back at the studios) to the security monitor and suddenly everyone will realize just what a very important person you are.*

### DARKSEED

I have managed to get the mirror to become operational, I've opened the grandfather clock, and I've got the paper from the book in the library. What now? How do I get into the barber shop? What can I do in the alien world (I've got the binoculars) but most importantly how do I open the front door in the main world or use the skull staircase? Casper Newbold, Cokem.

*There are a number of secret doors in your house and ones you've got them open you should leave them that way. You can forget about the barber shop for there's nothing there of interest. On the second day return to the garage and listen to the radio for the message that explains that two secret doors must be left open to allow you to walk through them in the dark world. Go to the hall and collect the piece of mirror. Use the shard to repair the mirror then walk through. Use the gloves (found in the car's glove compartment) to pull the lever in the dark world and this will open the front door for you.*



**As shadows fall over the graveyard wall And the Living Dead Rise from their beds, And go out to prey on you and I.**

**Beware the vampire's kiss my friend And flee the soft velvet dream, Those hands so soft Which are caressing you now, Will hold you while you scream.**

### EYE OF THE BEHOLDER II

In Eye of the Beholder II, I'm stuck behind a big green shield, and I think I need a hammer to break it. Please help. Nathan Mead, London.

*Well, don't look at me, I haven't got one. I assume you are talking about the Azure Seal which lies on Level*

*2 of the Temple, behind the entrance which is sealed against all who do not have the Mark of Dushmoot. The mark is gained on Level 3 of the Silver Tower and you will also find that a green crystal hammer +3 (with the subtle name of Sheldbrecker) can be found here. It's searching in the north-west section of the level.*



**"The argument you just won with your girlfriend - it isn't over yet."**



*Write down your little problems and send it in a plain envelope to: 'Dear Vampyra' CU AMIGA, Priority Card, 30-32 Farringham Lane, London EC2R 8AU.*



## ENQUIRIES

## POLICE QUEST 1

**C1:** I hope you can help me. I have managed to get to the hotel on *Police Quest 1*, and have discovered that I have to send Mane away in a taxi. I have tried everything but I am unable to do this. What am I supposed to do?

**Coral Grieve, Gateshead.**

## SWORD OF HONOUR

**C2:** Help! HELP ME, or I'll go crackers. I'm stuck on that brilliant game *Sword of Honour*. I can complete level 1 with no problems, and the same for level 2, but everytime I do, I get stuck. I give the monks everything I need to, I go around collecting every item I need to, and I beat up the enemy millions of times, but I just can't get off level 2! Boo hoo gibber gibber! Pleasee slop me

# Helpline

Once again it's time to curl up on the mat in the corner and give out a little Tender Loving Care, as we extend our arms to those in need. If you'd like a little TLC, then write to Helpline TLC, CU AMIGA, 30-32 Farringdon Lane, London EC1R 3AU.

from Core Design, and have to say that I'm completely useless at it. A

## RESPONSES

## CIVILISATION AGA

**X1:** In the game *Civilisation AGA* you can create your own map with your own terrain using a 256 colour pencil package. To do this, all you have to do is load the file 'Map.lbm' and change any pixels you like, but you must be careful not to put sea where a lake sits, or make the map too big (use the same size that is already there). Also, always remember the top and bottom lines will be made into arctic.

If you have *Azap* or a similar program, you can change the file 'CIVILX.SVE' to give you infinite cash. To do this, write down the amount of cash you have, load the file into *Azap*, convert your cash figure into hexadecimal, then search for this number on the first page of the file, change the figure to 7530 (or 30,000 in cash).

**John Ogden, Lancashire.**

## IMPOSSIBLE MISSIONS

**X2:** How would you like to have all

*Valhalla* and *The Lord Of Infinity*... just to help you all happy we've given you the codes to get into the levels.

the access codes for *Impossible Mission 2025*? Fancy that do you? OK then, here they are:

Level 1.1 -	No code
Level 1.2 -	ETOCWXLB
Level 1.3 -	EXOBEXYP
Level 2.1 -	FBOBRXYH
Level 2.2 -	FFOBYXRL
Level 2.3 -	FJQHMXPB
Level 3.1 -	FNQERXAO
Level 3.2 -	FRQDRXWH
Level 3.3 -	FUQZNXFL
Level 4.1 -	FZOAXXUA
Level 4.2 -	GDQLWXU
Level 4.3 -	GHOVLXVG
Level 5.1 -	GIQCCXRG
Level 5.2 -	GLQZGXCU
Level 5.3 -	GQOBXJOF

## VALHALLA

**X3:** We've had lots of requests for all the level codes for *Valhalla* and *The Lord Of Infinity*, so just to keep you lot happy (especially those who can't wait for the rest of the solution), here they are:

Level One -	No code needed
Level Two -	LQPFQW
Level Three -	UHGWL
Level Four -	ABEFT

## A HELPING HAND

Writing to CU AMIGA Helpline couldn't be easier. Just pop your enquiry or solution in an envelope, heading your letters nice and clear if possible, and then bundle it off to CU Helpline, CU AMIGA, Pitney court, 30-32 Farringdon Lane, London EC1R 3AU.

Please indicate on the back of the envelope whether you are sending an enquiry or a response.



We're code crazy this month - *Impossible Mission's* codes are given away on this page

from going insane by helping me! **Mark Foreman, Saltash.**

## HOOK

**C3:** I am stuck in *Hook*. I have collected a thimble, pan pipes, bow, net, marbles, dead branch, shell, fixed the slingshot and used it. But I still cannot figure out how to fly. Also I cannot find pixie dust because Tink promptly disappeared from the round pond after I picked up the thimble. **Danny K, UAE.**

## ANOTHER WORLD

**C4:** My wife and I are both prisoners. We bought *Another World* by US Gold and managed to get through level 1, but are now completely stuck on level two. Can you help please?

**Mr and Mrs L.F. Williams, Gillingham.**

## JAGUAR XJ220

**C5:** I know this is an old game, but I really could use your help on it. I recently got hold of *Jaguar XJ220*

Isend told me that there is a way to get your car to travel at over 400 miles per hour while still holding the road perfectly.

Could you please tell me how to do this, as my friend has forgotten. **Gavin Weston, Salisbury.**





# Silica



# GET SERIOUS

This month Get Serious covers a huge range of products, everything from hard drives to RAM boards, from graphics utilities to 3D rendering programs.

- 88 ZYDEC RAM UPGRADE**
- 88 IMAGEBANK**
- 89 CD-REPAIR KIT**
- 92 LIGHTWAVE**
- 94 VISTA PACK**
- 98 MATHS VISIDN**
- 99 SMART STOR**
- 101 IMAGE MIRROR**
- 102 ESSENCE & FDRGE**
- 104 MDDM**
- 108 PD SCENE**
- 115 PD UTILS**
- 120 ART GALLERY**



The CU AMIGA top rated accolade for non-gaming products scoring over 80%. They will definitely be worth the money and are likely to set as a benchmark for future releases.

## IMAGEBANK

Textures



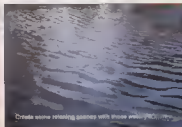
However, the quality of the images lets the package down. The images vary from below average to extremely poor quality and most of them suffer from terrible pixelation, where edges of shapes break up into squares. If you are intending to use the images as backdrops for Scale presentations where the viewer will only see them from a distance you might get away with this poor quality, but avoid if you plan to use them for DTP and 3D texture mapping.

It is a pity that the quality of the pictures is so poor because while there aren't that many pictures (20 in all) the selection itself is wide and varied. The range varies from marble, wood through to grass, bricks and sky.

If Visual Promotions can improve the quality of these images, maintain the price and variety of product type supplied they'd have a winner on their hands. However, as the package stands, the images are only really suitable for basic work or video backdrop presentations.

Available from: Visual Promotions, PO Box 206, Folkestone, Kent CT19 5EZ.  
Tel: 0303 245378. Price: £10.95 (10 disks), £14.95 (14 disks).

75%



## ZYDEC RAM CARD

AT 200 RAM upgrade

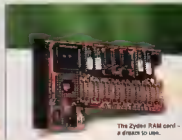
The Zydec RAM card is a 'mapdock board' which fits into the expansion bay underneath the machine. It is available in a variety of configurations, increasing memory by 512k, 1Mb, 2Mb and 4Mb using ZIP DRAMs. All the ZIP DRAM chips are relatively easy to fit, SIMM sockets may have been better. The board comes with a battery backed clock and if you wish you can add a maths co-processor (PLCC or PGA). There is also an option (via a jumper setting) to disable the extra RAM – a very nice touch!

One thing I really liked about this board was the labelling on the circuit board itself. Every jumper switch, setting and socket is clearly labelled stating exactly what it does and what settings to use – out of the box! But if you do need to refer to the manual there are two and half pages of information detailing practically everything you could possibly want to know about its operation and configuration. This is well worth reading, as there is a wealth of useful information to be found.

Installation was a simple painless process and the board functioned flawlessly. Performance wise the board clocked in at 2.69 MIPS – according to the Amiga benchmark program, Sysinfo. This performance rate is identical to the Blizzard 1204 RAM board, and approximately 1.99 times faster than a standard A1200.

Available from: Everham Micros, Unit 19, St Richards Rd, Evesham, Wores WR11 6TD. Tel: 0386 765500. Price: £159.99

85%



The Zydec RAM card – a dream to use.

















**Fed up of sitting around doing Jean Luc Picard impressions in his new polo neck Andy Leaning seemed like the best person to review a product that has made a major impact in the US and is about to make one here.**

**L**ightWave is a seriously addictive application. After just a few minutes using this excellent 3D rendering package you're hooked. So what exactly is so great about LightWave to make us and stateside animators so excited?

Well, the first thing that strikes you is the sheer size of the package. It comes on seven disks with a 300-page manual. These disks contain LightWave itself, various tutorial files and numerous objects and surface textures all of which must be installed onto the hard drive using the standard Commodore installer. Once installed

you have the option of loading one of four programs: the modeller, the rendering program and secondary versions of each especially written to take advantage of Amigas which have maths co-processors fitted.

To create a 3D image, the first port of call is the modeller program, where the shapes and forms (objects) which make up a 3D image are composed. In this program you can fiddle about with the objects to your heart's content, re-size them, rotate them and add special effects before you finally set up lighting conditions and then render the scene. In the modeller program, you can also create environments and save the resulting frames out to disk. The rendering program is where the program creates the images for you (from your composition) taking care to calculate where the shadows fall, removing objects hidden behind others, and tracking beams of light as they bounce off surfaces.

The modelling program is based around a fairly standard three view system (front, side and top down) allowing you to see your object as it is built and manipulated from different view points. A fourth view is also available allowing to view your objects in perspective. On this fourth display you can create forms and shapes from a variety of basic geometrical tools such as, box, ball, disc, cone, and a freehand sketch tool. These are used to create an object in one dimension which can then be extruded

(ie depth added) in other dimensions, building a 3D form. There are several extrusion facilities, allowing you to extrude along a curved path (ideal for creating organic shapes) or in a set dimension.

Drawing with these tools will build up a collection of polygons and points. The polygons form the flat parts of an object to which you can add colour and texture to give the object a solid look. The points are generally the interconnecting locations of polygons and are used as reference points. Polygons can be given surface names which can then be referred to in the rendering application when changing their attributes.

#### **RIGHT TOOLS FOR THE JOB**

At first, I thought that this rather limited amount of tools would be a potential problem for creating more complex forms. Admittedly, the grouping of objects into larger shapes is possible, and the freehand sketch tool could create some cool shapes but I was still sceptical. However, I quickly discovered that once a basic object has been set up there are numerous tools available to distort it beyond recognition such as drilling, shearing, twisting, bending, beveling, tapering and subdividing an object into its individual elements (a square becomes four straight lines for instance).

Using the combination of these facilities allows the generation of every shape imaginable. Complex objects can also be created through the







## André Digard checks out some Vista utilities which are available either as a package or separately.

**A**h, those mist covered mountains, treets of luscious pines and, almost certainly islands in the sun. Valerian Rhedopy. You will, I'm sure, have come across several landscapes created with the near ubiquitous Vista series of programs. They abound in the latest demos. If you are lucky enough to have Vista yourself then you'll know all about the number of men hours last trying to find that particular landscape using all manner of connected numbers. Once you have exhausted all of your islands' phone numbers and have entered as many barcodes as you can find, it tends to get a bit dull trying to create your idea of paradise.

Never fear, Terraform's here! Terraform is a program specifically designed to create personalised landscapes. You could even use it to recreate a genuine landscape. It has some simple tools to modify the map, rough, smooth, freshen, mountain, crater and flatten. It also provides a 3D close-up of the map, allowing you to touch up the exact altitude and gain an overall impression of the final scene.

On the whole Terraform works very well, letting you edit any Vista or Vista Pro DEM file. So, if you've discovered that your mouse's serial number makes some lovely little archipelagos, you can now add your own final touches to it. The manual is brief and, whilst a little unclear in places, provides all you need to know without pussy-footing around.

However, there are a few problems with this little program. The first and definitely the most aggravating is that the program will only work in

NTSC mode. This means that every time you want to use the program you must either boot into NTSC or select an NTSC monitor from preferences. If you're swapping between Terraform and Vista then, for convenience, preferences is the only sensible option as it will switch between NTSC and PAL without you having to reset.

Worse still, especially from the average user's point of view, Terraform will only work if you have some "fast memory." So if you're using Vista Pro Lite on an unexpanded A1200, or any other machine with only chip memory, it will refuse to work properly. Using a PD program such as FakeMem, available from most good PD libraries, solves this problem but you must change screen mode from preferences.

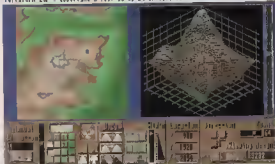
Lastly, I managed to get the program to flap a couple of times. This means you have to save your work very regularly or risk losing it, worse still the program gave me the option of either retrying the failed operation over and over or to quit, no option to cancel. I was not impressed.

Well, maybe I was. Despite these unfortunate shortcomings, Terraform is lots of fun. It took a

## TERRAFORM 2.1

Vista Landscape Generator

Terraform 2.1 - Copyright © 1991-93 by D. Shroely 11



It's amazing what a couple of barcodes can conjure up.

while to get it working but it was definitely worth the wait. If you've already lost a few pleasurable years to Vista just wait until you can design your own landscapes. Terraform 2.1 will keep you enthralled for far longer than almost any game. If you use Vista professionally, this is a must. Best of all is the price, which is what most utilities should cost, so I automatically forgive most of the faults.

**WARNING:** You must have Vista, Vista Pro or Vista Pro Lite for this program to be any use. Available from: Emerald Creative Technology, Rapid House, 54 Wandale Bank, London SW19 1DW. Tel: 081 715 8866. Price: £9.95

90%

## MAKEPATH

VISTA UTILITY

**A**nother little ground shaker for Vista. MakePath is used to create wonderfully smooth animations of landscapes. The program is based around what its name suggests, that of making a path for the camera to follow. What immediately sets it up as an essential is that the path will always be smooth. MakePath calculates a nicely curved, mathematically defined flightpath for the camera, following contours and corners with extraordinary grace.

The path you have defined can be edited, with extra points added or removed, the number of frames changed, the speed of animation altered or even just some little tweaking of the exact flight path. It really is very easy to use. You can chop and change as much as you want to. You can define your vehicle from a number of presets. Including helicopter, cruise missile and dune buggy. You can also define your own vehicle or modify the existing ones. This is done by specifying the altitude, roll rate, pitching and acceleration.

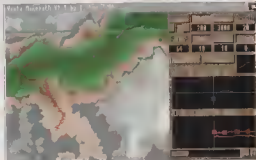
There are also a couple of added effects like the fact that you can "barrel roll" your

camera or you could choose to "spin" around the landscape (or even both at once, but not if you want to keep your lunch). You can also set the camera to shoot at just one point, giving the effect of looking out of the window of the vehicle.

Once you have defined all of your undoubtedly stunning animation (you'd have to try really hard to make a bad one using this program), you can ask MakePath to show you a preview of the flight. It's a little slow, more than a bit clunky and done in wire-frame graphics, but it does give an idea of the end result. This is the only part of the program that could do with a serious upgrade.

In combination with Terraform, Vista becomes a whole new program. Being able to create your own landscape and then easily define a flight path over it

Follow the dotted line to MakePath to create wonderful animations.



is something else. It will absorb you for months.

For less than a tenner this program is an absolute must. It brings Vista to life in an amazing fashion. You can expect your Amiga to be rendering for days, your hard drive to be filled by ever more ambitious animations and you'll be insisting that someone buys you a canvas director's chair. If you've become bored with Vista, get this.

If you're a regular Vista user, sing for joy while you're looking for your credit card. **WARNING:** You must have Vista, Vista Pro or Vista Pro Lite for this program to be any use. Available from: Emerald Creative Technology, Rapid House, 54 Wandale Bank, London SW19 1DW. Tel: 081 715 8866. Price: £9.95

95%

## VISTA PRO/PRO LITE

Landscape Generator

If you don't have Vista and are interested in creating your own landscapes and animations then Emerald Creative are running an offer that should grab you. For the price of just £49.95 you will get Vista Pro or Vista Pro Lite with MakePath and Terraform. For £29.95 you get this package with Distant Stars included. Vista Pro requires 4Mb or more of memory and Vista Pro Lite requires 2Mb or more. Both packages require a hard disk, preferably a big one. Check with Emerald to find out which suits you best. It's a great offer and will keep you captivated for more hours than you thought you had.

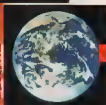
Available from: Emerald Creative Technology, Rapid House, 54 Wandale Bank, London SW19 1DW. Tel: 081 715 8866. Price: £49.95 or £29.95 (includes Distant Stars).



# Virtual Exploration Starts Here!



Left: Orion's Ring; Right: the earth



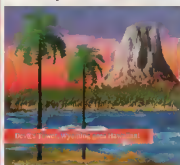
Your Door to the  
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Here's your spaceship to distant galaxies and Distant Suns! New features to Distant Suns 5.0 include: AGA support throughout, 3-D Planet Rendering, 2 disks of images in 256 colors (8-bit AGA), 8,000 sample stars from the Hubble Guide Star Catalog, new intuitive tool palette, additional menu choices, and a greater selection of AREXX commands.

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9,100 stars and 450 galaxies, nebulas and star clusters. Reproduce eclipses and lunar phases. Click on any object in the virtual sky for instant access to a full menu of information. £27.95



Below: Japan's Mt. Fuji; Bug Sur, California

## Blow Your Mind With Virtual Reality

### VISTAPRO 3.0

Artists, programmers and thrill-seekers agree, Vistapro 3.0 is a spectacular high energy ride with the impact of an all terrain vehicle. The user can accurately recreate and explore landscapes on the earth and Mars in gorgeous 24-bit color. Based on real-world data obtained from NASA spacecraft and the U.S. Geological Survey, Vistapro 3.0 gives you many amazingly accurate landscapes to explore. Soar the Alps... Japan's Mt. Fuji... Bug Sur, California... Mt. St. Helens before and after the eruption, even cruise the surface of Mars! It's the next best thing to being there! Vistapro features point and click three-dimensional trees; buildings, roads and grass; clouds; fractal texturing, the ability to generate left and right images for three-dimensional viewing and more! £29.95

### VISTALITE

Vistalite is a compact version of Vistapro 3.0 for Amiga computers with 2MB of RAM (1.5 megabytes of contiguous free memory). A number of Vistapro 3.0's features have been simplified so that they no longer require so much memory. With Vistalite, the user gets the same friendly point-and-click interface that is the standard with Vistapro and can still create 'fly-through' animations with Virtual Reality Laboratories' MakePath. Vistalite uses a special 'Tiny' landscape size (130x130 data points), but can still open and use Vistapro landscape files and create billions of unique random fractal landscapes. £29.95

### MAKEPATH

Makepath allows users to create complex animation sequences with a few simple mouse clicks. The user has full control over the motion of the model. The program allows the user to control acceleration rate and bank pitch. £9.95

### TERRAFORM

Terraform is a Vistapro Digital Elevation Model (DEM) terrain editor. With Terraform you can modify an existing Vistapro landscape or create your own! Add dams to rivers, roads climbing up mountains — or put your own face on Mars! Includes tool to build mountains, make craters, flatten or roughen areas, or paint elevations. £9.95

## VIRTUAL EXPLORATION PACK

Includes: Vistapro 3.0 (or Vistalite), Distant Suns 5.0, Makepath and Terraform. £69.95

## VISTA EXPERIENCE PACK

Includes: Vistapro 3.0 (or Vistalite), Makepath and Terraform. £49.95

All prices are inclusive of VAT 17.5%

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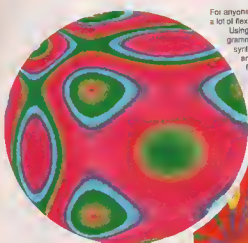
Epic Marketing - Shropshire  
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**Meridian Software Distribution Ltd.**



# MATH VISION



**Always a sucker for swirly colour patterns, Tony Horgan takes a look at a new form of scientific psychedelia.**

I thought this was going to be one of those diatribe kaleidoscope programs where you press a few buttons and get lots of pretty patterns. I was right about the patterns, but there's much more to MathVision than that.

MathVision is a kind of fractal generator, although it does a lot more than just the usual Mandelbrot and Julia patterns. In fact, the manual does its best not to mention the word 'fractal' at all. The keyword here is maths, rather than fractals. To get the most out of the program, you've got to be prepared to get your hands dirty with some equations and algebra. This isn't necessarily a bad thing, but the claim on the box that MathVision is 'A tool that feels like a game' is way off the mark.

The object of MathVision is to create abstract images. It creates these images from a series of calculations. Different calculations lead to different images. However, unlike most fractal generators, with MathVision you have to write the formulas yourself – or at least edit the example formulas.

For anyone who knows what they're doing, there's a lot of flexibility in this system.

Using MathVision is rather like using a programming language, complete with all those syntax errors. You set up a few variables, and then write a list of instructions to perform mathematical functions on them. As you might imagine, you never know quite what's going to happen when you run your little sequence of sums. Quite often you'll end up with something as unspectacular as a line, or perhaps a couple of circles. Other



MathVision comes up with some wonderfully... at... colourful images. Turn on colour cycling and come along!

times, you might strike it lucky and generate a wonderful screen of pulsating colour. Usually, you'll get something between the two.

## OPEN UNIVERSITY

Once you've created your list of maths functions, you can plot them with one of three options: sin plot, contour or perspective. These decide how the calculations are translated on screen. The simple option plots lines, and is usually the least spectacular of the three. Contour is a good choice if you want screens that look like the ties worn by Open University presenters. Perspective draws up a transparent cube, and then fills it with a kind of 3D graph. Each of these three methods has its own set of parameters, which can be tweaked from the menu. By changing these settings, you can create

Below: formulas like these that are behind the fleshy patterns on this page – you know, just elementary sums and stuff

an almost infinite amount of different images from the same formula.

MathVision is more than just a tool for making pretty patterns. It's almost as if the graphics are an excuse for a session of good hard maths. If you can get your head around it, there are loads of things you can do with the program. It comes with a selection of 'hooks', extra modules that can be loaded into the main program to expand its features. These include fractal routines, features for representing maths as sound, and stacks more. It also comes with a number of other add-ons, like the simple paint program that uses semi-random routines for its alternative drawing tools, and there's even a simple morphing/warping section. It could really do with a more disciplined front-end to tie up all these appendages a little more neatly.

## CONCLUSION

If all you're interested in is fleshy pictures, then all of this might seem like a lot of hard work – and you'd be right – but the results can be spectacular.

However, if you like messing around with complex maths, just for the hell of it, then this is tailor made for you. You could go on tinkering with it for years, exploring all of its little quirks, features and miscellaneous extra bits. If you get adventurous, you can even write your own hooks, and expand the program to suit your requirements.

To get the most out of MathVision, you'll have to be prepared to work through the daunting manual which explains maths functions with the help of stomach-churning analogies using cabbage juice. If you can get through those without throwing up, then you have my congratulations. **CU**

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### EASE OF USE

Not the most user-friendly system, requiring a good knowledge of maths, but then that's half of the attraction.

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A unique package, but suffers from a sprawling design which can make it difficult to use.

**“The perfect gift for all maths addicts.”**

**OVERALL 68%**

```

WA: null(fa, set(d,100000)) *init distance, find min, return color compute
FA: null(fb(0,0),fb(.81,.59,1),fb(-.31,.95,2),fb(-1,0,3),fb(-.31,-.95,4)
FB: fc(fda(1,a2),a3) * pass distance and regent to accumulator
FC: ifc(a1<d, null(set(d,a1),set(c,a2)),8) *set color for smallest distance
FD: sqrt(sqrt(x1-a1)*sqrt(y-a2)) *euclidean distance
  
```







# Easy PC

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GAMES	GAMES	GAMES	ASSASSINS	MUSIC/DEMO	MUSIC/DEMO
<b>18th Hole</b> [CAT 125 - 1 DISK] NOT 100% This is a very good looking golf hole game. Good music player too.	<b>Grand Prix 93</b> [CAT 1002 - 1 DISK] A magazine well done and by my deserved management game.	<b>Red Dwarf Quiz</b> [CAT 101 - 1 DISK] This is a very large of the TV series with the Dave Gorman quiz. Very funny.	<b>Assassins 3</b> [CAT 101 - 1 DISK] McDonald's good looking game Only 100% perfect game.	<b>Faithful 242</b> [CAT 101 - 1 DISK] Contains a very funny video sequence and is the final product type music.	<b>Gospel Karaoke</b> [CAT 101 - 1 DISK] It sounds absolutely brilliant.
<b>3D Games Series</b> [CAT 101 - 1 DISK] Includes a brilliant 3D adventure game, which is absolutely huge.	<b>Gush</b> [CAT 101 - 1 DISK] This is a probably the best version of a puzzle game you can get. Very much fun and very addictive.	<b>Road To Hell</b> [CAT 101 - 1 DISK] You never over find racing in yet another game. This infinitely addictive game can consume your whole life.	<b>Assassins 123</b> [CAT 101 - 1 DISK] Includes the excellent Amiga 2 with 100% perfect game.	<b>9 Flangers</b> [CAT 101 - 1 DISK] An audio book brought to you from the Amiga. It's a very good book and is a real treat.	<b>Jesus On Cheese</b> [CAT 101 - 1 DISK] A really fast paced game.
<b>Automobiles</b> [CAT 101 - 1 DISK] This is a bit more 3D than the type of game you can get. It's a bit like a game and plays well.	<b>High Office</b> [CAT 101 - 1 DISK] This is a working word based game for two players. It's a bit like a game and plays well.	<b>Starburst 13</b> [CAT 101 - 1 DISK] This is a very good looking game. It's a bit like a game and plays well.	<b>Assassins 95</b> [CAT 101 - 1 DISK] Includes two brilliant management games which are very different from each other.	<b>Aluminium</b> [CAT 101 - 1 DISK] This is a game with a nice little in the Amiga.	<b>Piece Of Mind</b> [CAT 101 - 1 DISK] A great 100% perfect game.
<b>Advanced Hero Quest</b> [CAT 101 - 1 DISK] Let the computer be the game master, and you be the challenge. You need the bit and game only.	<b>Jellyquest</b> [CAT 101 - 1 DISK] A sort of Q. Star puzzle, and a good one of that. Very good.	<b>Task Force</b> [CAT 101 - 1 DISK] It's supposed to be a strategy game. It's a bit like a game and plays well.	<b>Assassins 138</b> [CAT 101 - 1 DISK] Includes a brilliant management game. It's a bit like a game and plays well.	<b>Armageddon</b> [CAT 101 - 1 DISK] A game with a nice little in the Amiga.	<b>Scenex 2 Unlimited</b> [CAT 101 - 1 DISK] A game with a nice little in the Amiga.
<b>Deluxe Galaga</b> [CAT 101 - 1 DISK] A bit more fun than the type of game you can get. It's a bit like a game and plays well.	<b>Clave The Cat</b> [CAT 101 - 1 DISK] This is a very good looking game. It's a bit like a game and plays well.	<b>Tetren</b> [CAT 101 - 1 DISK] This is a very good looking game. It's a bit like a game and plays well.	<b>Assassins 128</b> [CAT 101 - 1 DISK] Includes a brilliant management game. It's a bit like a game and plays well.	<b>Arise</b> [CAT 101 - 1 DISK] A game with a nice little in the Amiga.	<b>Sequencial</b> [CAT 101 - 1 DISK] A game with a nice little in the Amiga.
<b>Diplomacy</b> [CAT 101 - 1 DISK] A very good looking game. It's a bit like a game and plays well.	<b>Knight's</b> [CAT 101 - 1 DISK] A very good looking game. It's a bit like a game and plays well.	<b>T.M.A.</b> [CAT 101 - 1 DISK] This is a very good looking game. It's a bit like a game and plays well.	<b>Assassins 139</b> [CAT 101 - 1 DISK] Includes a brilliant management game. It's a bit like a game and plays well.	<b>Attraction</b> [CAT 101 - 1 DISK] A game with a nice little in the Amiga.	<b>For Your Mind</b> [CAT 101 - 1 DISK] A game with a nice little in the Amiga.
<b>Golden Oldies</b> [CAT 101 - 1 DISK] A wonderful collection of songs from the early days. A good sounder too.	<b>Overlander</b> [CAT 101 - 1 DISK] A very good looking game. It's a bit like a game and plays well.	<b>Wacko Jr In Wonderland</b> [CAT 101 - 1 DISK] A very good looking game. It's a bit like a game and plays well.	<b>Assassins 190</b> [CAT 101 - 1 DISK] Includes a brilliant management game. It's a bit like a game and plays well.	<b>Doop Re-mix</b> [CAT 101 - 1 DISK] A game with a nice little in the Amiga.	<b>Star Trek Rave</b> [CAT 101 - 1 DISK] A game with a nice little in the Amiga.

ALL THE DISKS LISTED ON THIS PAGE ARE COMPATIBLE WITH ALL AMIGA COMPUTERS UNLESS OTHERWISE STATED

USEFUL	USEFUL	USEFUL	ANIMATION	MISCELLANY	1000 ONLY
<b>6400 Bytes letters</b> [CAT 101 - 1 DISK] Lots of letters for lots of things.	<b>EasyCalc</b> [CAT 101 - 1 DISK] Simply the best spreadsheet	<b>Pools Tools 2</b> [CAT 101 - 1 DISK] A very good looking game. It's a bit like a game and plays well.	<b>Animation Studio</b> [CAT 101 - 1 DISK] A very good looking game. It's a bit like a game and plays well.	<b>AMOS Libraries</b> [CAT 101 - 1 DISK] A very good looking game. It's a bit like a game and plays well.	<b>AGS Diagnostic</b> [CAT 101 - 1 DISK] A very good looking game. It's a bit like a game and plays well.
<b>Account Master</b> [CAT 101 - 1 DISK] A very good looking game. It's a bit like a game and plays well.	<b>Edword Pro 4</b> [CAT 101 - 1 DISK] A very good looking game. It's a bit like a game and plays well.	<b>PPM Mini Crunch</b> [CAT 101 - 1 DISK] NOT 100% A very good looking game. It's a bit like a game and plays well.	<b>Boat</b> [CAT 101 - 1 DISK] A very good looking game. It's a bit like a game and plays well.	<b>Communicate</b> [CAT 101 - 1 DISK] A very good looking game. It's a bit like a game and plays well.	<b>Base</b> [CAT 101 - 1 DISK] A very good looking game. It's a bit like a game and plays well.
<b>Amibase Pro 2</b> [CAT 101 - 1 DISK] Probably the best database program you can get. Very good looking too.	<b>Forecast</b> [CAT 101 - 1 DISK] A very good looking game. It's a bit like a game and plays well.	<b>S.I.R.D.S</b> [CAT 101 - 1 DISK] A very good looking game. It's a bit like a game and plays well.	<b>Boards Last Stand</b> [CAT 101 - 1 DISK] A very good looking game. It's a bit like a game and plays well.	<b>Octamed Tutor</b> [CAT 101 - 1 DISK] A very good looking game. It's a bit like a game and plays well.	<b>Friday At Eight</b> [CAT 101 - 1 DISK] A very good looking game. It's a bit like a game and plays well.
<b>Astronomy</b> [CAT 101 - 1 DISK] Probably the best database program you can get. Very good looking too.	<b>Grinder</b> [CAT 101 - 1 DISK] A very good looking game. It's a bit like a game and plays well.	<b>Start Of The Art</b> [CAT 101 - 1 DISK] A very good looking game. It's a bit like a game and plays well.	<b>Human Cannonball</b> [CAT 101 - 1 DISK] A very good looking game. It's a bit like a game and plays well.	<b>Spectrum Emulator</b> [CAT 101 - 1 DISK] A very good looking game. It's a bit like a game and plays well.	<b>Full Moon</b> [CAT 101 - 1 DISK] A very good looking game. It's a bit like a game and plays well.
<b>Audio Magic 7</b> [CAT 101 - 1 DISK] A very good looking game. It's a bit like a game and plays well.	<b>Hyperdrive</b> [CAT 101 - 1 DISK] A very good looking game. It's a bit like a game and plays well.	<b>Starview</b> [CAT 101 - 1 DISK] A very good looking game. It's a bit like a game and plays well.	<b>Liquid</b> [CAT 101 - 1 DISK] A very good looking game. It's a bit like a game and plays well.	<b>Speezy Classics</b> [CAT 101 - 1 DISK] A very good looking game. It's a bit like a game and plays well.	<b>Kindieklife Deluxe</b> [CAT 101 - 1 DISK] A very good looking game. It's a bit like a game and plays well.
<b>Classic Utilities</b> [CAT 101 - 1 DISK] A very good looking game. It's a bit like a game and plays well.	<b>Inscript</b> [CAT 101 - 1 DISK] A very good looking game. It's a bit like a game and plays well.	<b>Test Engine 4</b> [CAT 101 - 1 DISK] A very good looking game. It's a bit like a game and plays well.	<b>Main Actor</b> [CAT 101 - 1 DISK] NOT 100% A very good looking game. It's a bit like a game and plays well.	<b>Speezy Classics 2</b> [CAT 101 - 1 DISK] A very good looking game. It's a bit like a game and plays well.	<b>Love</b> [CAT 101 - 1 DISK] A very good looking game. It's a bit like a game and plays well.
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<b>Crunchers Disk</b> [CAT 101 - 1 DISK] A very good looking game. It's a bit like a game and plays well.	<b>Mandemind</b> [CAT 101 - 1 DISK] NOT 100% A very good looking game. It's a bit like a game and plays well.	<b>Uddly Disk Maker</b> [CAT 101 - 1 DISK] A very good looking game. It's a bit like a game and plays well.	<b>Raping Hormone 3</b> [CAT 101 - 1 DISK] A very good looking game. It's a bit like a game and plays well.	<b>Ultimate Cheat 2</b> [CAT 101 - 1 DISK] A very good looking game. It's a bit like a game and plays well.	<b>Relic 1.4</b> [CAT 101 - 1 DISK] A very good looking game. It's a bit like a game and plays well.
<b>D-Cop 3.1</b> [CAT 101 - 1 DISK] A very good looking game. It's a bit like a game and plays well.	<b>Mandemind</b> [CAT 101 - 1 DISK] NOT 100% A very good looking game. It's a bit like a game and plays well.	<b>Uddly Disk Maker</b> [CAT 101 - 1 DISK] A very good looking game. It's a bit like a game and plays well.	<b>Raping Hormone 4</b> [CAT 101 - 1 DISK] A very good looking game. It's a bit like a game and plays well.	<b>Ultimate Cheat 3</b> [CAT 101 - 1 DISK] A very good looking game. It's a bit like a game and plays well.	<b>Relic 1.4</b> [CAT 101 - 1 DISK] A very good looking game. It's a bit like a game and plays well.
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# SMART STOR

**It's fast, it's compact and it's smart, just like Andy Leaning. What a coincidence. Our tech editor looks at the Smart Stor external hard drive for A600 and A1200.**

The Archos OverDrive is well known in the Amiga market as one half of a hard drive for the A1200. It has established a name for itself as the fastest hard drive available, whilst also being the easiest to fit – it just plugs into the PCMCIA interface on the side of the Amiga.

However, the OverDrive wasn't the first Amiga 1200 hard drive Archos developed. It was actually their second model, its predecessor being considerably smaller, and in many senses more practical. Unfortunately, it was never released in this country, so has until now been relatively unknown.

Now Indl have rebadged it and released it under the name of 'SmartStor', and, as luck would have it they are also selling the OverDrive under the name of the SmartStor Plus.

Although SmartStor is an earlier version of the OverDrive, it differs in a number of ways. Firstly it is much smaller, and doesn't have the slick styling or elegant design of its predecessor. Instead, it comes as an ugly black box, that conflicts with,

rather than complementing, the casing of the A500 and A1200. This somewhat unappealing presentation is for a reason, though. Unlike the OverDrive which uses 3.5" hard drive mechanisms, the SmartStor is based around smaller 2.5" drives, and so Archos designed the casing to aim around these tiny drives with the minimum of wastage, saving money. For the reason SmartStor drives are very cheap.

The SmartStor connects to the credit card PCMCIA slot on the side of the Amiga, in exactly the same manner as the OverDrive and takes its power from this interface – there is no external power supplied input available here.

Once connected you simply turn on the Amiga and up it pops as a new device. Workbench, however, hasn't been pre-installed on the system in advance, so you'll have to do this before you can use SmartStor.

## WARP SPEED

Once it is up and running and everything's been installed it's very pleasing to use. I encountered no major problems whilst testing it, and loading applications and data revealed fairly rapid access times and transfer speeds. It is not quite up to the speed of the OverDrive (one of the fastest drives CU AMIGA has ever tested), but it's certainly faster than many of the internal A500 hard drives that are available.

The diminutive physical size and easy plug-in-and-go operation of the unit also makes it the most portable hard drive yet for the Amiga. It's great being able to load up your programs, nuplug it, nip round to your friends and have the programs instantly available. A major advantage for Amiga users on the move!

## MISSED OPPORTUNITY

The Amiga has a long tradition of external hard drives and since GVP launched the HDs+ for the A500 it's been popular for developers of such peripherals to also build further expansion potential into them – ie extra RAM, pass through ports and the like.

After all if you've got a box housing the hard drive, why not fill it with other stuff. However, Archos have not followed this tradition and the SmartStor is nothing more than a hard drive – a missed opportunity if ever there was one.

## CONSIDERATIONS

For A600, and to some extent the A1200, the SmartStor will be a welcome and useful expansion, providing an easy and simple hard drive upgrade. The only problem is the limited size of the configurations available, ie, just 20Mb or 30Mb. This is definitely not big enough for use on an A1200, but is possible on the A600 – but you're likely to run out of space sooner rather than later.

It could also do with a proper manual, in this month's Points of View (see page 162) I have complained about companies releasing product with awful packaging and manuals and, as if to prove a point, SmartStor turns up with a single A4 sheet for a manual! There is definite room for improvement here!

These limitations and the poor casing design mean that I can't give SmartStor as high a rating as the underlying technology deserves, but if you can live with the small capacity and styling it is an extremely good product. **2.5**

## SMARTSTOR £139/£169

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EASE OF USE	★★★★★★★★★
Not putting Workbench on it for you is a bit tight, but otherwise it's great.	
VALUE FOR MONEY	★★★★★★★★★
One of the cheapest hard drives available.	
EFFECTIVENESS	★★★★★★★★★
It's fast, compact, and does its job tirelessly.	
FLEXIBILITY	★★★★★★★★★
As an external expansion box Archos released out but not putting in further expansion potential for RAM and more through ports!	
INNOVATION	★★★★★★★★★
Great little product, but a bit dated with the OverDrive having been out so long.	

**A worthy buy for A600 owners, but A1200 owners should look for a bigger capacity drive.**

**OVERALL 85%**

They not only smart in the SmartStor is also smart in respect, it's testing typically just 20 or 30MB.





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YES	NO	NO	NO	NO
YES	NO	YES	YES	NO
YES	NO	NO	YES	NO
YES	NO	YES	NO	NO
YES	NO	NO	NO	NO
YES	NO	YES	NO	NO
NO	NO	NO	YES	NO
	YES	YES	NO	NO
	YES	NO	NO	NO
	NO	NO	NO	NO

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# IMAGE MIRROR

**Warped images from a warped mind? Tony Horgan twists a few pixels with a new image processor.**

There are surprisingly few image processors available for the Amiga. Art Department Professional, Image Master and Image FX are the main three, but now there's a new alternative in the shape of Image Mirror.

Before you can do anything with *Image Mirror*, you'll need to free up at least 10Mbs of hard drive space. As the program uses its own form of virtual memory (using the hard drive for temporary storage to reduce the amount of RAM needed), you can't use it on a floppy system.

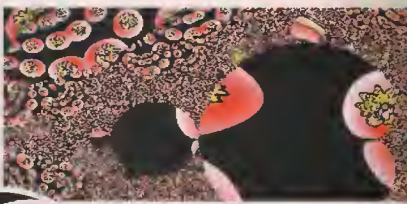
Once it's up and running, you're presented with a couple of windows. Scoot up to the menu, and strangely all you get is a Save and a Quit option. All of the image manipulation is carried out by moving icons around in the windows. These are arranged with all the tools or effects in the left window, and the window, and the other functions (loading, saving and so on) in the right window. When you load a picture, it appears in the bottom window as a little icon.

To pass it through an effect, you need to drag a loop across from the opposite window. You can then drag the picture icon over the loop icon to start the process. Are you still with me? It's what they call a drag and drop interface.

## ICON UNDERSTAND IT

All the icons are captioned to let you know of their function. It's a good job too, because otherwise you'd never guess what they did. The icon for "Fender Picture" has a man sticking his head into a microwave oven. The "Archive" icon shows a man wheeling a shopping trolley past a couple of Egyptian pyramids, and the "Rename" icon depicts the same man doing magic tricks with a cat in a box. It's more fun than drag menus I suppose.

Unlike most rival programs, Image Mirror will not display pictures in anything less than HAM 6 mode (4096 on-screen colours), even if your original picture only had two colours. You can change the display to HAM 6 on an A1200 or A4000, and there are also options for viewing in 24-bits through a Video Toaster or Opal Vision board. All processes are carried out in 24-bits. You can only save out 24-bit files. This is very limiting, unless of course you work with nothing other than 24-bit images. Amazingly, there are no options for loading or



IFF When you're forced to work with 24 bits, it's totally absurd not to have the option of saving images as JPEGs, which would use far less disk space.

## EFFECTS

Effects are Image Mirror's strongest feature. Although there aren't stacks of them, some are quite entertaining. One of my favourites is the Mandelbrot option, which takes your image, plots out a fractal kaleidoscope and then creates those

**Irresky abstract pictures:** Animations of effects can also be created. The complete list of effects is as follows: rotate twist, lip reflect, bubble, frayed vignette, bling, parm kaleidoscope, pic, wave, bright chromakey, noise, zoom fade-through, mandel stretch and morph. Most of these are geared towards distorting your original image, rather than touching up or improving poor-quality screens.

## SHORTCOMINGS

Although there are some nice features here, there are also quite a few omissions and shortfalls. Speed is one problem. Many of the processes take ages to render – far longer than they should in some cases. For example, the file option takes a specified rectangle of the image, and fills the screen with it. This could be done in a matter of seconds, but instead it plods along as if you've got a dialtone to wait.

The assumption that everyone wants to work in 24 bits is unfortunate. There are no options for converting images to different resolutions, or for changing the number of colors. These are basic requirements for any image processor. Unless you

Above: the excellent facial generator is just one of the programs a digital effects.

Let's If everything's looking just a bit too normal, Intage Mirror can send your pictures into a whole new, spinnier, twistier world.

use a separate utility for JPEG compression, you could find you soon run out of hard drive space due to the large 24-bit files.

I couldn't recommend *Image Mirror* over *Art Department Professional* or *Image FX*, both of which are far superior in most aspects. However, *Image Mirror* does have some unique effects, and as such would complement a more powerful image processor.

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### EASE OF USE

The icon-based drag and drop system is simple enough to operate

## EFFECTIVENESS

Office creates a low atmosphere effect

## FLEXIBILITY

Only worthwhile if you work solely in HTML or XML. However, it is held back by lack of many basic programming features.

## INNOVATION

Some good ideas and inspiring effects, but does little to advance the state of forest engineering.

*Fun as a secondary image processor but major limitations keep it well behind the leading pack.*

## OVERALL

61%



# ESSENCE AND FORGE



**Andy Leaning gets down to the essence of 3D textures and forges ahead with some simply stunning new surfaces.**

**E**ssence, in a nutshell, is an excellent collection of 3D images which wrap around shapes and objects in 3D ray tracing programs to give the images a realistic finish. It's a superb program

these questions lies in its format. For example rather than using standard IFF or jpeg formats Essence uses complex mathematical formulas which, before Forge only Imagine could use. Essence's textures are not straight graphics files. Instead they are files containing mathematical definitions — otherwise known as 'procedural' textures. This means Essence uses mathematics to create the textures rather than the standard series of dots or files

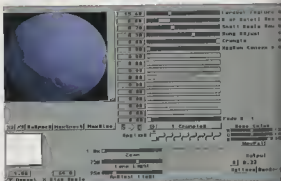
The program sets the final image size, colours and other attributes specific to a texture and a resulting image is rendered from scratch by running these parameters through a mathematical formula.

A typical example would be a mathematical algorithm that creates a grid and can fill the square in various colours. Input parameters would be the size of the individual squares on the grid, the gaps between the squares, the fill colour, whether to colour every square, every alternate square etc. By setting different values for these parameters you can change the look the final image completely — from a chess board to a city with roads and housing blocks.

There is of course the possibility that someone smart enough could write a program that would load these formulas, let you change the parameters and then save the resulting textures out as IFFs for use in other programs. This is exactly what Forge's Essence, and the program Forge are now sold in a pack by Emerald Creative which allow you to not only reuse old Essence textures as images for use in other 3D programs but also create an amazingly diverse range of new textures.

## SLIDE CHARLIE BROWN, SLIDE

Forge provides a very user-friendly front end into which you can load the various Essence procedural textures. On loading each texture you are presented



An Essence crumpled paper texture does the trick.

## MANUAL OVERRIDE

Computer manuals are notorious for being difficult to understand, badly written and too technical. However, the Forge manual is clear, concise and easy to read. Not only is it easy to understand and follow, it's a good index and contains everything you need to know, but the author also has a sense of humour which comes across in the manual. There are jokes and throwaways, many of which are relevant, but a great many are also very entertaining and actually make reading the manual enjoyable. Maximum thanks to Emerald Creative for a great manual.

with a series of sliders, on the right hand side of the screen, that affect the look of the texture. To the left of the sliders is a display which shows you the results of your changes. This view can be either spherical (a ball) or rectangular allowing you to see how various textures will wrap around corners etc.

In the preview display, resolution size and the time taken to redraw the image are in direct proportion to each other. For example, you see a low resolution sample of the effect your changes extremely fast, however higher resolutions variations

## VERY ANIMATED

One of the great things about Imagine is that you can also create 3D animated textures, just like the static ones. This further adds to the program's flexibility and makes it a powerful tool for 3D animated images.

One of the tricks in the anatomy of Forge is that you can also create 3D animated textures, just like the static ones. This further adds to the program's flexibility and makes it a powerful tool for 3D animated images.

This 'Crumpled' texture can be used for all kinds of products from simple objects to complex surfaces.

Testament to this is the fact that Essence 1.01 received a CU AMIGA top rated award when they were reviewed back in December '93. Despite the high score there was one major drawback though — you could only use Essence with Imagine! This was frustrating as Essence's infinite selection of textures couldn't be used with other 3D programs such as Lightwave and Real3D. Now thanks to Forge, Essence textures can be used with any 3D program.

So what exactly is Forge and how has it led to this welcomed ability to use Essence with any 3D program? And while we're about it why couldn't I Essence work with any other program apart from Imagine in the first place? The answer to both



# LOWEST PRICED TOP QUALITY RIBBONS, INKJETS, TONERS & DISKS

## Printer Ribbons

	BLACK	1/60	1/80	1/100	1/120	1/140	1/160	1/180	1/200	1/220	1/240	1/260	1/280	1/300	1/320	1/340	1/360	1/380	1/400	1/420	1/440	1/460	1/480	1/500	1/520	1/540	1/560	1/580	1/600	1/620	1/640	1/660	1/680	1/700	1/720	1/740	1/760	1/780	1/800	1/820	1/840	1/860	1/880	1/900	1/920	1/940	1/960	1/980	1/1000	1/1020	1/1040	1/1060	1/1080	1/1100	1/1120	1/1140	1/1160	1/1180	1/1200	1/1220	1/1240	1/1260	1/1280	1/1300	1/1320	1/1340	1/1360	1/1380	1/1400	1/1420	1/1440	1/1460	1/1480	1/1500	1/1520	1/1540	1/1560	1/1580	1/1600	1/1620	1/1640	1/1660	1/1680	1/1700	1/1720	1/1740	1/1760	1/1780	1/1800	1/1820	1/1840	1/1860	1/1880	1/1900	1/1920	1/1940	1/1960	1/1980	1/2000	1/2020	1/2040	1/2060	1/2080	1/2100	1/2120	1/2140	1/2160	1/2180	1/2200	1/2220	1/2240	1/2260	1/2280	1/2300	1/2320	1/2340	1/2360	1/2380	1/2400	1/2420	1/2440	1/2460	1/2480	1/2500	1/2520	1/2540	1/2560	1/2580	1/2600	1/2620	1/2640	1/2660	1/2680	1/2700	1/2720	1/2740	1/2760	1/2780	1/2800	1/2820	1/2840	1/2860	1/2880	1/2900	1/2920	1/2940	1/2960	1/2980	1/3000	1/3020	1/3040	1/3060	1/3080	1/3100	1/3120	1/3140	1/3160	1/3180	1/3200	1/3220	1/3240	1/3260	1/3280	1/3300	1/3320	1/3340	1/3360	1/3380	1/3400	1/3420	1/3440	1/3460	1/3480	1/3500	1/3520	1/3540	1/3560	1/3580	1/3600	1/3620	1/3640	1/3660	1/3680	1/3700	1/3720	1/3740	1/3760	1/3780	1/3800	1/3820	1/3840	1/3860	1/3880	1/3900	1/3920	1/3940	1/3960	1/3980	1/4000	1/4020	1/4040	1/4060	1/4080	1/4100	1/4120	1/4140	1/4160	1/4180	1/4200	1/4220	1/4240	1/4260	1/4280	1/4300	1/4320	1/4340	1/4360	1/4380	1/4400	1/4420	1/4440	1/4460	1/4480	1/4500	1/4520	1/4540	1/4560	1/4580	1/4600	1/4620	1/4640	1/4660	1/4680	1/4700	1/4720	1/4740	1/4760	1/4780	1/4800	1/4820	1/4840	1/4860	1/4880	1/4900	1/4920	1/4940	1/4960	1/4980	1/5000	1/5020	1/5040	1/5060	1/5080	1/5100	1/5120	1/5140	1/5160	1/5180	1/5200	1/5220	1/5240	1/5260	1/5280	1/5300	1/5320	1/5340	1/5360	1/5380	1/5400	1/5420	1/5440	1/5460	1/5480	1/5500	1/5520	1/5540	1/5560	1/5580	1/5600	1/5620	1/5640	1/5660	1/5680	1/5700	1/5720	1/5740	1/5760	1/5780	1/5800	1/5820	1/5840	1/5860	1/5880	1/5900	1/5920	1/5940	1/5960	1/5980	1/6000	1/6020	1/6040	1/6060	1/6080	1/6100	1/6120	1/6140	1/6160	1/6180	1/6200	1/6220	1/6240	1/6260	1/6280	1/6300	1/6320	1/6340	1/6360	1/6380	1/6400	1/6420	1/6440	1/6460	1/6480	1/6500	1/6520	1/6540	1/6560	1/6580	1/6600	1/6620	1/6640	1/6660	1/6680	1/6700	1/6720	1/6740	1/6760	1/6780	1/6800	1/6820	1/6840	1/6860	1/6880	1/6900	1/6920	1/6940	1/6960	1/6980	1/7000	1/7020	1/7040	1/7060	1/7080	1/7100	1/7120	1/7140	1/7160	1/7180	1/7200	1/7220	1/7240	1/7260	1/7280	1/7300	1/7320	1/7340	1/7360	1/7380	1/7400	1/7420	1/7440	1/7460	1/7480	1/7500	1/7520	1/7540	1/7560	1/7580	1/7600	1/7620	1/7640	1/7660	1/7680	1/7700	1/7720	1/7740	1/7760	1/7780	1/7800	1/7820	1/7840	1/7860	1/7880	1/7900	1/7920	1/7940	1/7960	1/7980	1/8000	1/8020	1/8040	1/8060	1/8080	1/8100	1/8120	1/8140	1/8160	1/8180	1/8200	1/8220	1/8240	1/8260	1/8280	1/8300	1/8320	1/8340	1/8360	1/8380	1/8400	1/8420	1/8440	1/8460	1/8480	1/8500	1/8520	1/8540	1/8560	1/8580	1/8600	1/8620	1/8640	1/8660	1/8680	1/8700	1/8720	1/8740	1/8760	1/8780	1/8800	1/8820	1/8840	1/8860	1/8880	1/8900	1/8920	1/8940	1/8960	1/8980	1/9000	1/9020	1/9040	1/9060	1/9080	1/9100	1/9120	1/9140	1/9160	1/9180	1/9200	1/9220	1/9240	1/9260	1/9280	1/9300	1/9320	1/9340	1/9360	1/9380	1/9400	1/9420	1/9440	1/9460	1/9480	1/9500	1/9520	1/9540	1/9560	1/9580	1/9600	1/9620	1/9640	1/9660	1/9680	1/9700	1/9720	1/9740	1/9760	1/9780	1/9800	1/9820	1/9840	1/9860	1/9880	1/9900	1/9920	1/9940	1/9960	1/9980	1/10000	1/10020	1/10040	1/10060	1/10080	1/10100	1/10120	1/10140	1/10160	1/10180	1/10200	1/10220	1/10240	1/10260	1/10280	1/10300	1/10320	1/10340	1/10360	1/10380	1/10400	1/10420	1/10440	1/10460	1/10480	1/10500	1/10520	1/10540	1/10560	1/10580	1/10600	1/10620	1/10640	1/10660	1/10680	1/10700	1/10720	1/10740	1/10760	1/10780	1/10800	1/10820	1/10840	1/10860	1/10880	1/10900	1/10920	1/10940	1/10960	1/10980	1/11000	1/11020	1/11040	1/11060	1/11080	1/11100	1/11120	1/11140	1/11160	1/11180	1/11200	1/11220	1/11240	1/11260	1/11280	1/11300	1/11320	1/11340	1/11360	1/11380	1/11400	1/11420	1/11440	1/11460	1/11480	1/11500	1/11520	1/11540	1/11560	1/11580	1/11600	1/11620	1/11640	1/11660	1/11680	1/11700	1/11720	1/11740	1/11760	1/11780	1/11800	1/11820	1/11840	1/11860	1/11880	1/11900	1/11920	1/11940	1/11960	1/11980	1/12000	1/12020	1/12040	1/12060	1/12080	1/12100	1/12120	1/12140	1/12160	1/12180	1/12200	1/12220	1/12240	1/12260	1/12280	1/12300	1/12320	1/12340	1/12360	1/12380	1/12400	1/12420	1/12440	1/12460	1/12480	1/12500	1/12520	1/12540	1/12560	1/12580	1/12600	1/12620	1/12640	1/12660	1/12680	1/12700	1/12720	1/12740	1/12760	1/12780	1/12800	1/12820	1/12840	1/12860	1/12880	1/12900	1/12920	1/12940	1/12960	1/12980	1/13000	1/13020	1/13040	1/13060	1/13080	1/13100	1/13120	1/13140	1/13160	1/13180	1/13200	1/13220	1/13240	1/13260	1/13280	1/13300	1/13320	1/13340	1/13360	1/13380	1/13400	1/13420	1/13440	1/13460	1/13480	1/13500	1/13520	1/13540	1/13560	1/13580	1/13600	1/13620	1/13640	1/13660	1/13680	1/13700	1/13720	1/13740	1/13760	1/13780	1/13800	1/13820	1/13840	1/13860	1/13880	1/13900	1/13920	1/13940	1/13960	1/13980	1/14000	1/14020	1/14040	1/14060	1/14080	1/14100	1/14120	1/14140	1/14160	1/14180	1/14200	1/14220	1/14240	1/14260	1/14280	1/14300	1/14320	1/14340	1/14360	1/14380	1/14400	1/14420	1/14440	1/14460	1/14480	1/14500	1/14520	1/14540	1/14560	1/14580	1/14600	1/14620	1/14640	1/14660	1/14680	1/14700	1/14720	1/14740	1/14760	1/14780	1/14800	1/14820	1/14840	1/14860	1/14880	1/14900	1/14920	1/14940	1/14960	1/14980	1/15000	1/15020	1/15040	1/15060	1/15080	1/15100	1/15120	1/15140	1/15160	1/15180	1/15200	1/15220	1/15240	1/15260	1/15280	1/15300	1/15320	1/15340	1/15360	1/15380	1/15400	1/15420	1/15440	1/15460	1/15480	1/15500	1/15520	1/15540	1/15560	1/15580	1/15600	1/15620	1/15640	1/15660	1/15680	1/15700	1/15720	1/15740	1/15760	1/15780	1/15800	1/15820	1/15840	1/15860	1/15880	1/15900	1/15920	1/15940	1/15960	1/15980	1/16000	1/16020	1/16040	1/16060	1/16080	1/16100	1/16120	1/16140	1/16160	1/16180	1/16200	1/16220	1/16240	1/16260	1/16280	1/16300	1/16320	1/16340	1/16360	1/16380	1/16400	1/16420	1/16440	1/16460	1/16480	1/16500	1/16520	1/16540	1/16560	1/16580	1/16600	1/16620	1/16640	1/16660	1/16680	1/16700	1/16720	1/16740	1/16760	1/16780	1/16800	1/16820	1/16840	1/16860	1/16880	1/16900	1/16920	1/16940	1/16960	1/16980	1/17000	1/17020	1/17040	1/17060	1/17080	1/17100	1/17120	1/17140	1/17160	1/17180	1/17200	1/17220	1/17240	1/17260	1/17280	1/17300	1/17320	1/17340	1/17360	1/17380	1/17400	1/17420	1/17440	1/17460	1/17480	1/17500	1/17520	1/17540	1/17560	1/17580	1/17600	1/17620	1/17640	1/17660	1/17680	1/17700	1/17720	1/17740	1/17760	1/17780	1/17800	1/17820	1/17840	1/17860	1/17880	1/17900	1/17920	1/17940	1/17960	1/17980	1/18000	1/18020	1/18040	1/18060	1/18080	1/18100	1/18120	1/18140	1/18160	1/18180	1/18200	1/18220	1/18240	1/18260	1/18280	1/18300	1/18320	1/18340	1/18360	1/18380	1/18400	1/18420	1/18440	1/18460	1/18480	1/18500	1/18520	1/18540	1/18560	1/18580	1/18600	1/18620	1/18640	1/18660	1/18680	1/18700	1/18720	1/18740	1/18760	1/18780	1/18800	1/18820	1/18840	1/18860	1/18880	1/18900	1/18920	1/18940	1/18960	1/18980	1/19000	1/19020	1/19040	1/19060	1/19080	1/19100	1/19120	1/19140	1/19160	1/19180	1/19200	1/19220	1/19240	1/19260	1/19280	1/19300	1/19320	1/19340	1/19360	1/19380	1/19400	1/19420	1/19440	1/19460	1/19480	1/19500	1/19520	1/19540	1/19560	1/19580	1/19600	1/19620	1/19640	1/19660	1/19680	1/19700	1/19720	1/19740	1/19760	1/19780	1/19800	1/19820	1/19840	1/19860	1/19880	1/19900	1/19920	1/19940	1/19960	1/19980	1/20000	1/20020	1/20040	1/20060	1/20080	1/20100	1/20120	1/20140	1/20160	1/20180	1/20200	1/20220	1/20240	1/20260	1/20280	1/20300	1/20320	1/20340	1/20360	1/20380	1/20400	1/20420	1/20440	1/20460	1/20480	1/20500	1/20520	1/20540	1/20560	1/20580	1/20600	1/20620	1/20640	1/20660	1/20680	1/20700	1/20720	1/20740	1/20760	1/20780	1/20800	1/20820	1/20840	1/20860	1/20880	1/20900	1/20920	1/20940	1/20960	1/20980	1/21000	1/21020	1/21040	1/21060	1/21080	1/21100	1/21120	1/21140	1/21160	1/21180	1/21200	1/21220	1/21240	1/21260	1/2128
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# ACEEX FAX MODEM

**André Digard reaches out, touches Cyberspace, sends his phone bill into orbit, faxes himself around the country and loves every second of it.**

**M**any jokes are told about long evenings spent running up the phone bill, calling up bulletin boards and surfing the Internet. Once you have a modem, though, you quickly realise that the bills are no joke. However, they're definitely worth it though.

It's tempting to spend an entire weekend on the Internet but unless you are independently wealthy or get free phone calls that's just not practical. You soon become adept in the art of 'surfing' (ie logging on, quickly uploading or downloading then logging off to check out what you caught). The occasional prolonged chat or conference happens but usually it's wiser to create mail and carefully select files before calling anyone. Most bulletin boards, however, let you download a lot of files and conferences for you to peruse, so you can check it out and then call them when you know where you're going. It makes life much easier (and cheaper).

## BUILT FOR SPEED

The Aceex modem isn't going to win any awards for beauty but it comes out flying for speed. It always achieved above 1,600 characters per second (CPS) when transferring archived files. As an example a test file of an archived graphics file sized at 287,462 bytes was transferred in just two minutes and 54 seconds at an average of 1,651 CPS. Theoretically, with the modem using its compression, it could reach speeds of up to 57,800 bits per second (BPS) or 7200 CPS. In practice this is virtually impossible to achieve, the best average you should hope for is around 28,000 BPS or 3,500 CPS. This is true of all 14400 modems.

You should also bear in mind that almost every file you come across on a bulletin board is likely to already be compressed, which renders the

modem's compression practically useless. Hence the speed test results of an average 1,651 CPS is closer to what you are likely to achieve.

## SETTING A TRAP FOR FAXES

One of the best features of the Aceex, or any other similar modem for that matter, is its ability to send and receive faxes. Power Computing actually gives you the chance to buy TrapFax with the modem and it would be churlish not to consider it. The chance is too good to miss.

Theoretically it's possible to run TrapFax from a floppy disk but to use a modem like this you really must have a hard disk, and a big one at that.

Once installed the program works beautifully. It's a little frustrating at first as TrapFax is not one but several programs so you have to read the manual to find out how it works. Thankfully, the manual is well written and clear, though it does use quite a bit of jargon.

One great advantage of TrapFax is its size. The individual programs that make up TrapFax are fairly small so leaving auto answer on takes up a fair more sensible 70K in comparison with GP's 250K, most welcome if you cherish your memory. What's more, TrapFax works in conjunction with TrapDoor, an absolute must for FidoNet users.

## NOT ALL THERE

One surprise was the communications software provided or rather the lack of communications software. NComm 2 is provided and it's a good sturdy choice. The surprise was the missed opportunity to provide TrapFax with the modem. It may not have been used by everybody but surely the price of a disk would gain immense good will from customers.

The other missing item was any kind of reference to the Amiga. There wasn't even an A4 sheet telling you how to connect it on. Admittedly most Comms users wouldn't need it but these days we are trying to make Comms available to everyone.

## CAVEAT SURFER

If you intend to connect a 14400 BPS modem to an unexpanded A1200 be warned, because of the lack of FastMemory the modem will be limited to a top transfer rate of 38400 BPS. However, this often gives faster transfers when uploading or downloading files (see Speed Test, for right).

## CONCLUSION

The choice of modems on the market is definitely heating up. The Aceex has several minor niggling points. For example, it's not the best constructed modem in the world — the LEDs weren't quite lined up properly on the

review machine and the LEDs were badly printed. Another problem was its sensitivity, a couple of times I knocked the modem whilst I was on-line and it disconnected both times. However, modems seldom win prizes for beauty. What matters is how they work and the Aceex does its job admirably.

And with the addition of TrapFax the whole thing becomes an excellent package. If you want to send and receive faxes it performs perfectly, sending better quality faxes than you can with a dedicated fax machine.

Overall, whichever 14400 modem you choose you'll be making the right choice. They all work at about the same speed, they all have similar functions and they all increase your phone bill. The Aceex is a good little machine, if you want a modem you should consider it. **CU**

## SPEED TEST

To test the transfer rate of the Aceex I sent and received a 287462 byte archived graphics file. The results were:

AVERAGE TRANSFER TIME	AVERAGE TRANSFER RATE
174 Seconds	1,651 CPS

This file was transferred with the modem set to 28400 bps which can provide faster transfers than 57600 BPS due to reduction in attempts to compress the already compressed file. You should also note that the system on the other end of the line plays a large part in the speed of transfers.

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<i>Not for the absolute beginner, but no modem is. Transfer is excellent.</i>	
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<i>Everything you need to get started is now here though a little more expensive than most.</i>	
<b>EFFECTIVENESS</b>	★★★★★★★★★★90%
<i>As good as any other 14400 BPS modem.</i>	
<b>FLEXIBILITY</b>	★★★★★★★★★★90%
<i>The inclusion of fax software adds a whole extra useful dimension.</i>	
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<i>The only modem supplied with Amiga fax software.</i>	

**‘A fine little modem which should suit your needs as well as your pocket.’**

**OVERALL 85%**





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# SCENE

The best demo of the year has just turned up, according to Tony Horgan. Find out what the fuss is about in this month's PD Scene ...

## STARWOIDS game

I know it looks like just another Thrust clone, but Starwoids really is a bit special. It's a cross between Odr and Thrust, with a Star Wars theme. There are three levels in this version - a PD taster of a bigger shareware game. After the easy first level, it gets pretty tricky. If you're a Star Wars fan, there's plenty to get frothed up over. Loads of the music has been sampled from the films, and there are loads of other details through the game, such as the AT-ATs, C3PO and R2D2. You even get to shoot down some Tie Fighters. Whether or not you wear Luke Skywalker pyjamas to bed, Starwoids has enough meaty gameplay to keep any zap fan happy.

Available from:  
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1 The Cloisters,  
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£2.25 including  
P+P  
(two  
disks).

90%

## SOME JUSTICE 94

### AGA demo

Yes mister, I'll take two please! This is the best demo of the summer by a long shot! It's a sound and vision extravaganza, with the best soundtrack ever to grace an Amiga demo. Released to promote a new EP from Urban Shakedown, it's a remix of Some Justice, the



DEMO  
OF THE MONTH

hardcore anthem of 1992, produced by Urban Shakers themselves, and reworked into a colossal bass heavy jungle stomper. Stick this through a decent hi-fi and you just won't believe the sub-bass!

If that wasn't already enough, it's even got that brilliant Ce Ce Rogers vocal (see PD Utilities for the Urban Shakedown sample library). The graphics are just as hot too. Jungle-lined tunnels, warped animations, slippery plasma and hard-hitting strobes. Combined with the soundtrack, it's a complete brain-scrambler. Okay, so I did the visuals, but I'm not biased! (not half. Ed) Would I lie to you? Don't take my word for it - get yourself a copy now (and check out the EP while you're at it).

Available from: Cynosotic PD, Office 01, New Enterprise Centre, Little Heath Industrial Estate, Old Church Road, Coventry CV5 7NB. Tel: 0203 681687. Price: £2.75 including P+P

94%





**SPECTRUM AGA 1.3****spectrum  
emulator**

This is one of the better Spectrum emulators we've seen. This disk is bursting at the seams coming complete with 19 different games in all such as: 1943, Airwolf, Ace of Aces, Batty, Bomb Jack, Fernando Martin, Jet Pac, Jet Set Willy, Knight Lore, Livingston, Magic Miner, Match Point, Phoenix, Sabre Wulf, Sea Combat, Sir Fred, Spy Hunter, Starquake, Sternstrike, and Tarantula (an adventure game in Spanish).

There's a neat little front-end to the emulator which lets you type in pokes (cheats) before you load a game. You can also type in programs in BASIC, if you can remember where all the commands are on the keyboard. Instead of loading cassette games through a sound sampler, this one needs a special interface plugged into the joystick port. There are illustrated instructions for it on the disk. This disk is well worth a go just for the sheer variety of games on it.

Available from: On-Line PD, 1 The Cloisters, Halsall Lane, Formby, Liverpool L37 3PX. Tel: 0704 834335. Price: £1.50 including P+P.

**83%****MINI AGA SLIDESHOW 2**  
**slideshow**

Considering there are four disks in the set, there aren't many pictures in this slideshow. However, those that are included are quite impressive. It's an interlaced HAM-6, and very nicely rendered. The main problem is that they're just not very exciting. You can see the technical prowess, but a ray-traced scene from an MFI shop window is a bit yawnsome.

Available from: Cynostic PD, Office 01, New Enterprise Centre, Little Heath Industrial Estate, Old Church Road, Coventry CV6 7NB. Tel: 0203 681687.

Price: £6.00 including P+P. 3Mb RAM required.

**55%****ZOMBIES 2****game**

Buckets of blood and dead flesh are the main attractions with *Zombies 2*, the sequel to the Operation Wolf clone that was released with Blitz Basic. This time around it's a bit slicker, with better sound and graphics, but gameplay remains the same. Zombies have overtaken the world, and you've got to wipe them out with your mouse-controlled pistol and grenades. As the zombies get blown away, they litter the screen with detached limbs and hunks of meat, all to a stomach-churning soundtrack of spits and grins. Rather disgusting, but quite satisfying all the same.

Available from: On-Line PD, 1 The Cloisters, Halsall Lane, Formby, Liverpool L37 3PX. Tel: 0704 834335. Price: £1.50 including P+P.

**78%****ONLINE INTROS****demo compilation**

How's that for a bargain? You've got 12 demos crammed onto one disk! A few of them are a bit old, ranging from 83 to 94,

but even so there are some excellent visual effects and plenty of tricky ditches.

They're mostly BBS intros, with contributions from Lemon Virtual Dreamer, Models Inc., Avalon and Lego among others. There's plenty of wibbly visuals for the jelly-heads like myself, and if you're

into chip music that sounds like a Commodore 64 with a wasp stuck inside it, you'll love the tunes.

Recommended especially this month, as all the demo codes seem to have taken a summer break.

Available from: On-Line PD, 1 The Cloisters, Halsall Lane, Formby, Liverpool L37 3PX. Tel: 0704 834335. Price: £1.50 including P+P.

**80%**



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## REFERENCES

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## GAMES

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## AGA DEMOS

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## DENOMINATOR

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## SLIP/

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[illegible]

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# GOLF

game

Is Gorf? Did you guess already? We'd have to get up pretty early in the morning to catch you out wouldn't we? Gorf is a conversion of the coin op of the same name. It's a bumper bonanza of *Space Invaders*, *Galaga*, *Galaxians* and a couple of other shoot 'em ups. You get one level of each game, until you complete the lot, and it all wraps round to the start again.

This isn't an amazing conversion, but if you really want to get back to those 'good old days', it'll keep you quiet for a few minutes at 50.

Available from: Magnetic Fields,  
PO Box 116, Preston,  
Lancashire PR2 2AW.  
Tel: 0772 881180.

Price: £2.50 including P+P.

72%



## ATTACK!

animation

I thought this was going to be funny at first. Maybe it was the ropey sampled speech, or the similarity to those old Eric Schwartz Gulf War cartoons. I was wrong. Actually, on second thoughts, I was right. It is funny, but I don't think it's supposed to be. Here's the plot.

A Stealth Bomber appears on an enemy radar, which looks on and fires a missile. The plane takes a hit and plummets towards the desert floor. A nearby soldier suddenly realises that there's 1,000 tonnes of black metal heading straight for the mess tent, and tries to stop its advance with his rifle, but to no avail. The troops' dinner is rudely interrupted by the arrival of the plane, which rips right into the tent. The end.

Available from: Cynoscic PD, Office 01, New Enterprise Centre, Little Heath Industrial Estate, Old Church Road, Coventry CV6 7NE.  
Tel: 0203 561687. Price: £2.75 including P+P.  
Requires 1.5MB.



55%



## PLEASE RELEASE ME

animation

This one rates fairly high on the stupid-o-meter. It is quite amusing the first time around, however, it quickly loses appeal after a while. What we have is a glamorous cartoon crooner, wailing out the opening line of the country song



"Please Release Me"

The singer's head is, in fact, a balloon, which is promptly released on demand, and sent floating around the screen as it deflates. And that's it. Available from: Roberts Smith DTP, 190 Farnham Way, Hampstead Garden Suburb, London NW11 6JE. Disk no. MC003. Price: £1.40 including P+P.

70%

## APOLLO 11 HYPERBOOK

I love all this stuff about going to the moon. Even though it's had plenty of coverage with the recent anniversary the moon landing it is still fascinating stuff - if you're that way inclined.

This is a multimedia presentation kind of thing, created with Hyperbook. There's text, detailing the various aspects of the mission, and fuzzy digitised illustrations, mostly taken from video. You also get a few sound samples, including the "One small step" quote, and the countdown sequence. A third disk of pictures is available from the author, although the registration document didn't work on my copy. Available from: Cynoscic PD, Office 01, New Enterprise Centre, Little Heath Industrial Estate, Old Church Road, Coventry CV6 7NE. Tel: 0203 561687. Price: £3.50 including P+P.



76%





















## FLICK

### Animation Player

Another animation player? You mean we don't have enough already? Ah, but this one's not your usual animation player—it's what they all say. For each, though, it's true: Flick plays PG, PC, and nothing else. Not much cog you may think, and for the most part you would be right. PG animations tend not to be up to the quality of Amiga animations, it's not that the PG isn't capable (though even a fast 486 isn't as good as an Amiga 1200), it's just that the animation is without those points behind the PG. The author makes a big point of insisting on pixel art, which is a bit, enough, but why go to all the trouble of writing wordily text routines to convert G source to Amiga art, and then leave out a save option? An interesting curiosity of a program.

Available from: Magnetic Fields, PO Box 115, Preston, Lancashire PR2 2AW. Tel: 0772 881180. Price: £1.50 plus £1 P+P per order.

70%

## TWO CAN PLAY

### Educational

There's some great educational software around. Like Kids Disk, but there's always going to be some rubbish. Take this one for example. The screens have very little colour, and the whole thing looks very amateur. The games are dull and slow with pointless clicking between turns.

The author should take a long hard look at Kids Disk which outclasses Two Can Play in almost every respect, as I'm quite certain that its author is capable of producing something equally good. As it stands, I simply can not recommend this disk.

Available from: FL Licencesware, 31 Wellington Road, Exeter, Devon EX2 9DU. Tel: 0392 493580. Price: £3.99 including P+P.

10%



### Educational

Wow! Excuse me, I think that's my jaw down there by your foot. You might guess that this is something good. You're absolutely spot on. This is a quantum leap towards educational software that really works. It's just a little colour the alphabet program, with a few other bits and pieces thrown in for good measure but the presentation is simply superb.

It's fun to play and would best suit four to six year olds, though your four children may still get something out of it. For older children, or even adults, there is a lesson on binary. For programmers there is a painting package to learn from. If you have pre-school children, get this disk. If you program educational software, this disk is also must. The programmer, Duncan Morin, deserves great success. I wish him peace, and many children.

Available from: Roberta Smith QTP, 190 Falden Way, Hempstead Garden Suburb, London NW11 5JE. Tel: 081 455 1626. Disk No. DU170. Price: \$0p plus 50p P+P.

95%



## VIRUS WORKSHOP 3.8

### Virus Killer

This has to be the most comprehensive virus killer I have ever seen. The number of options is fantastic. If you're lucky enough to have never had a virus, then here's a quick explanation. A virus is a program that copies itself from disk to disk. Depending on the type of virus, the consequences

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File Edit	Keyboard	AutoKill	Kickstart 3.00	CPU 68020	MMU
MC680x0 Level 3 Points at	000F01220				
DOS ROM Vector Points at	000F0E460				
TOS Close Device() Points at	000F0C0C0				
ExecBase's VBI Points at	000F0E000				
MC680x0 Level 4 Points at	000F02382				
PutMsg() Points at	000F07500				
OpenWindow() Points at	000F01120				
MC680x0 Level 5 Points at	000F0D000				
LoadSeg() Points at	000F0D000				
WarnCapture Points at	000F0D000				
Kickstart Points at	000F0D000				
Kickstart Points at	000F0D000				
ColdCapture Points at	000F0D000				
ColdCapture Points at	000F0D000				
OldOpenLibrev() Points at	000F0D000				
Send HData() Points at	000F0D000				
DoIO() Points at	000F0D000				
VBI InterruptServer Points at	000F0D000				
TOS BeginIO() Points at	000F0D000				

could be system crashes, erased disks, corrupted files and so on. Virus Workshop is a very thorough system, and unlike most virus killers it will even check a hard disk. Beginners could find it very difficult to use, but if you know your Amiga it's well worth getting hold of. Available from: Cynoptic, Office 01, New Enterprise Centre, Little Heath Ind Est, Old Church Road, Coventry CV5 7NB. Tel: 0203 6816 87. Price: £2 including P+P.

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# ART GALLERY

**Fish, planes, Lemmings, Barney Rubble – and utter rubbish. Lisa Collins lays down the law on this month's crop of art.**

## DOGFIGHT 44

by Kevin Wefel, Surrey.



1. First, the outline is drawn in DPaint using the linedraw tool and fill with medium zoom.



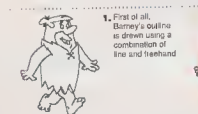
2. Next, the plane's details are added using cut and paste, stepping and anti-aliasing.



3. Then, the background is added using filled boxes. The clouds are formed using a circle brush in low zoom.



4. Finally, using cross match and colour boundaries on the clouds, the final details to the picture are added.



1. First of all, Barney's outline is drawn using a combination of line and freehand.



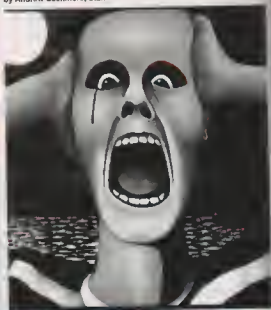
2. The colours are then mixed and the frame is blocked in using flood fill.



3. Next, the outlining of the cinema begins. Guess what film Barney's going to see?

## THE SCREAMER

by Andrew Cashmore, Staffordshire.



Can you believe Paul Leon from London came up with this? He calls it *My Dream*, more like my nightmare. What are you on you sad git? Look, go and get some help before you do yourself an injury. How did you manage to come up with so much rubbish on such a good machine? It must have taken guts to come up with the idea of drawing different coloured circles over and over again. Not. Did you know that purple is a colour associated with madness? Explains a lot really.





### THE FISH

by Ryan Wade, Milton Keynes.



### LEMMINGS SURPRISE

by Simon Askhem, Leicester.



4. Some posters and other details are added to the cinema to liven things up a bit.



5. Finally, some last minute changes to the colours and here's Barney.

### CYBORGIE CRAZY

by Sam Page, Gloucestershire.



1. In *DPaint III*, the head is drawn first in freehand using the magnify option in low resolution with 64 colours.



2. Then the body is sketched in and the EBPR unit is added. The metal effect is achieved by using an air brush with different coloured greys. The greys are smoothed together using the smooth mode.



3. The body is finished off using the magnify option. The electros are then added, followed by the blood supply bag.



4. The background is loaded and the Cyborgie is pasted on top. Finally, a few details are added to finish it off.



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# AMIGA Workshop

ISSUE 22 OCTOBER

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## Regulars

### 150 QUESTIONS AND ANSWERS

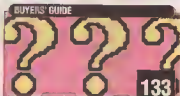
Questions, questions, questions... what's it all about ah? Where does belly button fluff come from? What time is it on the moon? Does anyone still own a pair of nylon Bay City Rollers socks? These mysteries of the universe may go unsolved but if you've got questions about your Amiga then John Kennedy and Andy Leaning have all the answers.

### 158 BACKCHAT

That's the letters page to you, dar! You need an introduction to the letters page? Okay, well people write things to us, we print 'em, and then we print an informative and occasionally witty reply. You also get to meet the CU AMIGA team and find out what they've been up to this month. You even get a side splitting Fat Side cartoon!

### 162 POINTS OF VIEW

Do we want big flashy boxes with shiny pictures and glossy manuals, or would you rather receive your new RAM board in a drab brown carton with nothing more than a serial number for decoration? Andy Leaning admirably manages not to use the phrase 'beating deaver' in his assessment of the matter.



**BUYERS' GUIDE**  
Adverts aren't always what they seem: The great print might look insignificant, but it could hold key information about the service you can expect from the advertiser. Andy Leaning explains the jargon and marks out the potential pitfalls.



**OCTAMED 4 TUTORIAL PART 5**  
Tony Horgan is one of the few people who can tell a break beat from a heartbeat. This month the amazingly musically talented one shows you how useful use of Octamed 4 commands can revolutionise your music making. So get groovin' with CU AMIGA's funk master!



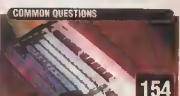
**Q & A MASTERCLASS**  
Creating your own icon-launched AmigaDox scripts is as easy as falling off a rather large piece of wood when you know how. From writing the script, to designing the icon, and linking it all together, John Kennedy guides you through the whole process.



**DIRECTORY WORK TUTORIAL**  
Last month's CU AMIGA DIR Work coverdisk can completely transform the way you use your Amiga. This month, ever organised Andy Leaning takes a tour of the program's incredibly varied uses and features and shows you how to get organised.



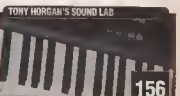
**PETER LEE'S ANIMATION MASTERCLASS**  
It's amazing what you can do with a bit of imagination and a copy of Deluxe Paint or Brilliance. Broaden your horizons with yet more tricks and tips from the top men in Amiga animation, as Peter Lee lays bare his amazing trade secrets.



**COMMON QUESTIONS**  
Some questions seem just too silly to ask but there's no problem too big or too small for CU AMIGA. How do you program your Amiga? What's Kickstart? What use is the file slot on the side of the A1200? All of these and more are answered by the sage-like Kennedy-Leaning team.



**WIRED WORLD**  
You can reach a lot of people with a modem these days. In fact, with a selection of food delivery establishments, a personal phone line and a comfortable chair you need never go out again. Maybe John Kennedy has been in touch with the outside world yet again.



**TONY HORGAN'S SOUND LAB**  
Is Yamaha's QY8 really the ultimate portable music machine... or is it just a flashy Gargagonee with particularly good sound effects? We want Tony Horgan on a trans-European Orient Express trip to test it out. Well, you've got to do these things properly haven't you...









BUYERS GUIDE

PART  
**3**

# THE CU AMIGA GUIDE TO PICKING A PRODUCT

Over the last few months the buyers' guide has covered the process of how you buy a product, this month Andy Leaning shows you how to interpret an advert.

Looking through the various advertisements in CU AMIGA you'll quickly discover that there is a vast amount of information hidden away in the text and photos on these pages.

Most of these adverts are fairly clear and helpful, but there is still the occasional 'ad speak' sentence or vague statement waiting to catch you off guard. Here we examine a typical advert and explain statements like 'at home warranty', whilst stocks last, E&OE, next working day and price match, same product - same price mean.

**Whilst Stocks Last:** Exactly what it means. The advertiser has secured limited stocks of a product. When they run out the offer finishes.

**At Home Warranty:** This means that if the product breaks down a repair man will come to your house to repair it rather than you having to send it away. When comparing different advertisements check the callout time - ie how long it will take for a repair agent to turn up. The normal callout times are 8, 24 and 48 hours.

**Next Working Day:** Most people make the mistake of believing this to be the day after they've ordered, it isn't! If you order goods on a Friday or, say, before a bank holiday they will not arrive until the following Monday or Tuesday - not Saturday.

**E&OE:** Errors and Omissions Excepted. Adverts are usually produced to very tight deadlines so they are produced quickly. In the computer market product specifications can change overnight, so mistakes are occasionally made. This abbreviation essentially means that the advertiser can't be held responsible for mistakes in the advert and accepts that mistakes may occur.

**Price Match:** These always look better than they are. You'll usually find some qualifying statement such as 'at the manager's discretion' or 'on same product basis'. These usually mean that the advertising company will only match the competitor's price if it wants to, or that it will only be matched with companies offering exactly the same product and specifications. As most companies offer their own bundles it is rare that you'll find two companies offering the same products to price match.

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**P&P:** No one doesn't stand for personal and private, it means postage and packaging. Unless it clearly states that dispatch and postage are free you may assume that you'll have to pay extra for it. In most cases the cost will be quoted.

\* This is a special advert created for this article.



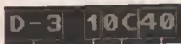
# OCTAMED 4

## PART 5 The key to OctaMED's full power lies within its commands.

This month we take a look at how they work, and what they can do for your tunes.

### COMMANDS

Many of OctaMED's more powerful features are accessed through the commands. The commands are all those letters and numbers next to the notes. Look at the diagram below to see where the commands sit on each line of the block.



This is the note. D-3 means note D on the third octave.

This is the instrument number.

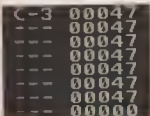
These two digits are the command.

The last two digits are the value for the command.

Commands change the way instruments are played. Instead of just playing the sample from start to finish, with commands you can create volume and pitch slides, arpeggio and vibrato effects, and loads of other variations. All the command numbers and their values use hexadecimal apart from the volume command, which can be switched between hexadecimal and decimal.

### ARPEGGIO 00

This creates simulated chords, by changing the pitch of the instrument three times in quick succession. The resulting sound is similar to the pseudo-chord sounds heard in old C64 game music. The root pitch of the chord is specified by the note you enter on the block. The two value



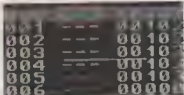
digits specify the next two notes of the chord, as semi-tone steps up from the original pitch.

In the example on the left, the instrument will be

played as a major C chord, using notes C, E and G. The note entered was C, which is the root pitch. The values of 47 specify E (4 semi-tone steps up the keyboard from C), and G (7 semi-tone steps up the keyboard from C). To sustain the arpeggio effect, enter more commands in the following lines.

### SLIDE UP 01

Use this to create upward pitch slides. It decreases the period of the note by the amount of the value on each timing pulse. Don't worry if the sounds



confusing, as you can create pitch slides without having to enter any pitch commands. See the panel on command slides for the easy way to make pitch slides.

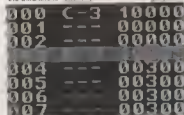
### SLIDE DOWN 02

As above, but slides down.

### PORTAMENTO D3

You can use this as an alternative to the slide commands. The value sets the speed of the slide. Take a look at the example below.

The note would first be played as a C. When the third line is reached, the note E is not played.



but the slide is started. The E specifies the destination pitch of the note which is still playing (currently as C). The number 05 sets the speed of the pitch slide. The following commands of 3 continue to slide the note up until it reaches its destination pitch of E. All portamento commands after this has happened will be ignored.

### VIBRATO 04

Vibrato changes the pitch of the instrument up and down very quickly. The first digit of the value sets the speed of the vibrato. The second sets the depth (the amount of pitch fluctuation). You can

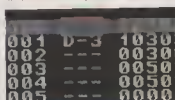


use this to add some movement to a short looped instrument, or just to add strange gargling effects to other sounds. It can also sound like the motor's packed up on your tape deck.

### SLIDE AND FADE D5

Protracker compatible.

This is a combination of the portamento and fade commands. Set a slide going by using the portamento command as explained above. The 5

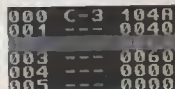


command can now be used to continue the portamento effect, and also set the sound fading out. The value is the fade speed.

### VIBRATO AND FADE 06

Protracker compatible.

As above, but this combines the vibrato and fade



commands. The value is the fade speed. Set up a vibrato, and then use the vibrato and fade command to continue the vibrato at the previously defined rate, and fade out at the rate specified by the value.

### TREMOLO 07

Protracker compatible.

This is described as a kind of volume vibrato — it changes the volume of the sound at a specified rate. The first digit of the value sets the speed



```
000 D-3 187DF
001 --- 00700
002 --- 00700
```

while the second digit sets the amount of change in volume. To continue the effect, insert blank tremolo commands on following lines, as shown here.

### HOLD AND DECAY 06

You can set the hold and decay values with this command. The first digit of the value is the hold

```
00 C-3 10823
01 --- 00000
02 --- 10000
03 --- 10000
04 --- 10000
05 --- 00000
```

length of the note, and the second is the decay rate. Lower decay rates give larger decays. Use - (entered by pressing Return) in following lines to extend the hold further than the specified length.

### SECONDARY TEMPO 09

This sets the secondary tempo (the number of timing pulses per quarter note). The value can range from 0 to 20.

### POSITION JUMP 08

The song plays up to this command, and then jumps to another position in the play sequence. The song will then loop back to this specified point when it reaches the end of the song. This lets you have an introduction sequence which would only play once. The rest of the song could then loop forever, without repeating the intro. For example, to jump to position three in the play sequence, use a value of 02. A value of 00 would jump to the first position.

### SET VOLUME 0C

This sets the volume for the instrument, which overrides the default volume set in the Instrument parameter panel. However, it does not override the relative volume of the track, set from the VOL panel, but it will be affected by it. The volume command normally uses decimal numbers for its

```
00 D-3 10C30
01 --- 00000
```

value, but you don't change to hex by clicking the VOL: HEX button from the main Play panel. Volumes can be changed when the instrument is first played, and also while it continues to play. The example above sets the initial volume to 30, and then increases it to 60. By changing the volume on each line, with a last tempo, you can produce strobing effects that work well in dance tracks.

### VOLUME SLIDE 0D

Slides the volume up or down. The first digit of the value is used to slide the volume up, the second to slide it down. This has the advantage of being smoother than changes with the C command. In this example, the instrument is played with a volume of 40, then the volume is decreased over two lines, and then pushed back up to its original level.

```
000 C-3 10C40
001 --- 00000
002 --- 00000
003 --- 00000
```

### SYNTH JUMP 0E

When this is used with a synthetic or hybrid instrument, it triggers a jump in the waveform sequence list. It will jump to the line that corresponds to the value given after the command. For example, in

```
000 C-3 100000
001 --- 000000
002 --- 00E005
003 --- 000000
004 --- 000000
005 --- 000000
```

the case above, the synth sound would jump to line five in the waveform sequence.

### MISCELLANEOUS OF

This command has a number of functions, depending on the values entered after it.

**0F00:** This makes the song to jump to the next block in the play sequence. If you are just playing one block, it jumps back to the top of that block.

**0F01-0F05:** change primary tempo. This changes the tempo of the track. The value must be in hex (decimal), but will be displayed in decimal on the tempo slider. Tempos between 01 and 0A are compatible with Soundtracker. For more accurate compatibility, use the 09 command (in which case the secondary tempo should be set to 33).

**0FF1:** plays the note twice. A line reading C-3 20FF1 is the same as two consecutive lines reading C-3 20000 at double the tempo.

**0FF2:** plays the note only once, but doesn't start the note until halfway through the line (half a note later).

**0FF3:** plays the note three times (very fast)

**0FF4:** turns the low pass filter off.

**0FF5:** turns the low-pass filter on.

**0FFD:** changes the pitch of the sample currently playing, without re-triggering it. This is very useful if you don't want a noticeable jump back to the

```
000 C-3 100000
001 --- 000000
002 --- 000000
003 --- 000000
004 E-3 10FF00
005 --- 000000
006 --- 000000
```

start of the sample, when you've got a long instrument sound, but you want a change in pitch. The example below plays the instrument at C-3, and then changes the pitch to E-3.

**0FFE:** stops the song playing. This can be entered by clicking the STOP button whilst holding down the shift key.

**0FFF:** stops the instrument playing in that track. This also works with MIDI instruments, and is handy for songs using more than four sample channels.

### COMMAND SLIDES

OctaMED 4 has a handy function for creating volume ladders, and with a bit of trickery, you can use it to create slides for use with any of the other commands. To create a volume slide between two notes, both of the notes must have their volumes specified by the C command, as in the picture below.

Move to any line between the two notes, and click the VOL button from the RANGE panel, making sure that edit mode is active. The lines between the notes will be filled with volume commands, ranging from the value of the first volume to the second (see below).

By creating a volume slide, and then changing all the Cs to another number or value, you can have automatic graduations of any other command. All the other commands use hexadecimal values, so you should first change the volume setting to hex. Do this by clicking the HEX button from the PLAY panel. Now your volume slides will be in hexadecimal.

If you want to keep your volume commands in decimal, remember to click the DEC button next to the HEX button after you have created the slide.

### PITCH SLIDES

The pitch slide functions are similar to the volume slider. Enable edit mode, and position the cursor over the first note, or the line from which you want the slide to begin.

Click the SLIDE 2 button from the RANGE panel, and the appropriate slide commands will be inserted to the following lines. Alternatively use the SLIDE 1 button, which creates a portamento type of slide.

### NEXT MONTH

We continue with explanations of all the remaining commands next month, including all the MIDI commands.



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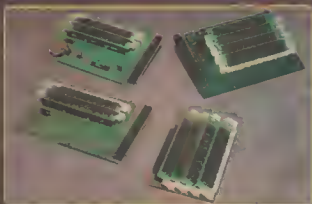
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# MASTERCLASS

In this month's masterclass, John Kennedy helps you do away with the Shell by adding icons to scripts.

Sometimes the boundary where the Workbench ends and AmigaDOS begins can be a bit hard to cross. This is especially true if you are experimenting with AmigaDOS scripts and want to create your own icon so that the scripts can be executed from the Workbench like any other program.

Thankfully, there is quite an easy way around this problem, by making use of a special command hidden away on the Workbench disk: **ICONXX** (short for Icon eXecute) lives in the Workbench C: directory, and it is used to tie a script to an icon.

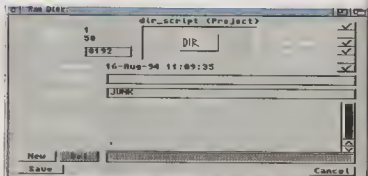
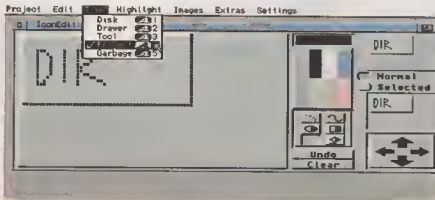
Let's create an example from scratch. Once you have grasped how it works, it will be easy for you to transform your own AmigaDOS programs into click-and-go icons.

First, let's create an AmigaDOS script — a script is nothing more than a plain text file full of AmigaDOS commands. The commands will be executed in order, as though you had typed them by hand at the Shell prompt. Use a text editor (not a Word Processor) to create a file containing the following:

```
echo "Performing listing of disk
directory..."
dir
echo "All done..."
```

If you don't have **GoldED** (public domain) or **Cygnus ED** (a commercial product), use the Commodore supplied **ED** command to create the file. It is important to use a text editor to ensure that no extra text formatting or style codes are allowed to sneak into the text. Save the file to the

Create a suitable icon with the **IconEdit** program (supplied as part of the Workbench). If, like me, you can't draw there are plenty of icons in the Public Domain.



**RAM Disk (RAM)** under the name **DIR\_SCRIPT**. You can check the file to make sure it's correct with the **TYPE** command at the Shell:

```
type ram:dir_script
```

Note that the case of the letters and filenames isn't important at the moment. Normally you could get this script to run by using the **EXECUTE** command at the Shell prompt, like this:

```
execute ram:dir_script
```

You might even have gone so far as to make the script execute automatically by setting the Script flag. This concept of file flags might be news to you, so from the Shell enter the following:

```
list ram:
```

You should get a list something like this displayed:

```
dir_script.info      11:13:13    3001 —
rw-d Today          11:13:13    50 —
dir_script           11:09:35    50 —
rw-d Today          11:09:35    50 —
Disk.info           3664 —
```

```
rw-d Today          09:54:44    Dir —
ENV                09:54:42    Dir —
Clipboard          09:54:35    Dir —
rw-d Today          11:13:15    216 —
3 files - 3 directories - 216
blocks used
```

The 'flags' are the series of letters and dashes that appear after the size of the file. One of the flags is the Script flag, and you can set it using the **PROTECT** command:

```
protect ram:dir_script +s
```

Now when you perform a list, you should see the extra flag present beside the **dir\_script** file. You can unset the flag using **-s** instead of **+s**. The other flags mark the files as read able, write able, delete able and archive able — you might want to experiment with them, but use your own best files rather than important Workbench utilities.

There are others flags (such as hidden, pure and archive) which are less common. The flags are really only of use when third-party disk backup programs are being used. In any case when the **dir\_script** has the 's' protection flag set, it will now execute automatically at the Shell. All you need to do is enter its name, like this:

```
dir_script
```

## DRAW AN ICON

This automatic execution is very useful, as it allows you to define your own new AmigaDOS commands. You can even pass parameters (such as filenames) into them, but that, as they say, is another story and it's still far from being our click-and-run solution. Returning to that particular challenge, the next stage is to use the **Icon Editor** program to create an icon.









# DIR WORK TUTORIAL

The excellent DIR Work was September's coverdisk demo. Continuing on from last month's coverdisk pages, Andy Leaning explores some more features of this fantastic program.

**PART 1**

Last month I covered the basic file tools of DIR Work such as Copy, Move, Delete, MakeDir, Show and Run etc. This month I'll be covering the DISK functions of the program. But before doing so I'll briefly explain the remaining buttons that I didn't get around to covering last month, these being INSTANT, PLAYSS, PLAYMOD, INSTANT will analyse the file type currently selected and make an intelligent guess as to what can be done with the file and carry this out. A program for example will be run, a sound file will be played whilst a graphic file loaded and displayed. PLAYSS: Will load and play sound files in the BSVX file format, whilst PLAYMOD will play

ProTracker and SoundTracker audio files

The DISK functions (Format etc) can be accessed by clicking on the DISK button or the menu option 'FLOPPY DISK/COPY/INSTALL'. The program can handle normal or high density disks, and when selected brings up a window containing a series of buttons. Clicking on these buttons allows you to select which disk drives to use and what functions to carry out. The screenshot below shows the requester that will appear when you click on this button, on the next page you'll find a similar picture covering the SYS button. Next month we'll examine how to configure the program:

**FORMAT:** Clicking on this button will format the disk in the Destination drive using a normal AmigaDos format command.

**FFS, Cache, International:** These affect the directory structure of disks when formatted. FFS (Fast Filing System) means that the disk will have faster access times, Cache has a similar result. International will format the disk using an international text structure which can be recognised in other countries.

**DISKCOPY:** This copies the entire contents of the disk in the drive identified as SOURCE to the disk marked as DESTINATION

**WRITEBUF:** Allows multiple copies of a disk to be made. If two disks are present and they are the same, DIR Work will keep the contents of them in memory. If you then insert a new disk into a drive you can click on this button to write the contents of memory out to the new disk without having to read the disk in first.

**INSTALL:** Makes the source disk bootable

**DISKCHECK:** When you click on this button the program will try to read every bit of the disk in the SOURCE drive and test the disk for reliability in the process

**SOURCE:** The buttons below this label determine which disk drive holds the disk you wish to copy from, or check. The contents of this drive will be copied to the disk in the 'destination drive'

**STATUS:** A status window telling you how far the current operation has got

**VERIFY:** Clicking on here will double check every time the program writes something to the disk - making sure it has been written correctly

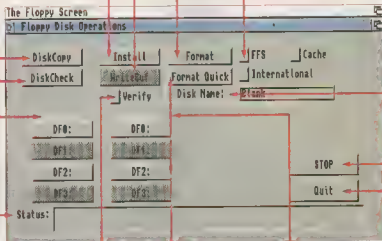
**QUICKFORMAT:** Similar in result to the normal Format command, but uses a quicker technique. This does not format the entire disk, but rather just the tables at the start which hold the information about the disk contents - formatting these fools the Amiga into thinking that the disk is blank.

**DESTINATION:** The buttons here signify which drive holds the disk that the source disk will be copied to. These are the buttons on which you click to Install, Format, and Format Quick.

**DISKNAME:** The name of the disk after formatting. EMPTY for example

**STOP:** Aborts the current operation. Disk Copy, Format etc

**QUIT:** Jumps back to Dir Work main screen.





The SYS button on the main DIR Work screen provides a range of diagnostic tools revealing the content and capabilities of your Amiga. Clicking on the SYS button brings up another window, this time containing a row of buttons at the bottom of it. From these buttons you can find out practically everything you could want to know about the current state of your Amiga.

These buttons cover both the hardware and software configuration of your system. The pictures below give you an idea of the kind of displays and information each button reveals.

**CARDS:** If you have a big box Amiga (A1500 to A4000) this will show what Zorro expansions you have.



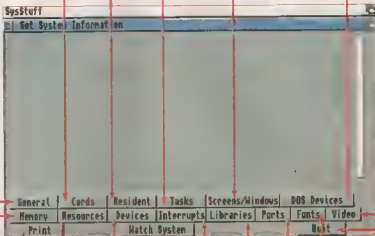
**RESIDENT:** Shows all programs, tasks and libraries resident in memory at the moment.

**TASKS:** Similar to RESIDENT, giving information about which tasks are loaded.

**SCREEN/WINDOWS:** Ever get confused about all the windows and screens that are open on your system, DIR Work to the rescue!



**GENERAL:** Tells you information about the operating system and chips inside the Amiga, including the processor, maths co-processor, which version of Kickstart and Workbench and the type of graphics chipset that you have.



**MEMORY:** The configuration of your RAM etc.



**DEVICES:** The names and addresses for the various software drivers for the hardware interfaces, such as the keyboard, and system timer.

**LIBRARIES:** If it's been a while since you spring cleaned your boot disk you've probably got loads of unused libraries floating around. This will help you find out what libraries are being used.

**VIDEO:** Need to find the resolution of a particular screen mode? Click here to solve your problem.

**QUIT:** Jumps back to the main DIR Work screen.

**FONTS:** Pretty obvious really what fonts are in use.

**PRINT:** Prints out the current display, giving you a hard copy of the information currently on screen.

**RESOURCES, INTERRUPTS, PORTS:** These three buttons are probably only useful to programmers, and reveal what software drivers are being used.



# LET'S GET ANIMATED

## PART 4 The fourth in our unique series of expert animation guides mixes

fun and professional projects using **DeluxePaint or Brilliance.**

**W**hy animate? Anyone who has created an animation will know the answer – it is a combination of the sense of achievement in actually getting a computer to turn your dreams into reality, and the chance to let your imagination loose and create the impossible.

And the bonus for those with high ambitions is that you can use your sequences as video titles or as opening scene-headers for a display of static graphics. Like the genius demo-makers who spend months on a five-minute flash of inspiration on the Amiga, it can just be Art for Art's sake.

So whatever your reasons for developing your animation skills, this month's tutorial will hopefully offer some new ideas and a little inspiration to help you get the very most out of your Amiga and your chosen drawing package, whether it's *DeluxePaint* or *Brilliance*.

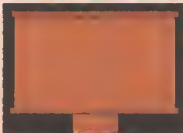
## TUTORIAL 1 BRILLIANCE: RED RIBBON

**Object:** using a morphing brush, to melt one object into another as a title for a wedding video  
**Mode:** *Brilliance*, 32 colour low-res; default palette, 20 frame sequence

Although this example would make a good video title, the techniques used can be employed for any animation where part of one object morphs, or changes into another. In a surprising way, in this example you'll also learn how to make quick and easy wood-grain effects.

1 The lectern on which the book stands is made up of two rectangles. Select mid brown as the base ground colour and draw a filled rectangle in the middle of the screen, as in the illustration. Using a brown which is one shade darker, draw the thin rectangular lips on the top and bottom, and add a light brown high-light on the top edges of the thin rectangles. The stand is simply a vertical rectangle centred under the larger one, with a thin rectangle acting as a 3D side on the right hand side.

2 Rectangles again, this time they are for the book



Two rectangles, and you've built your lectern. Note the highlight on leading edges.

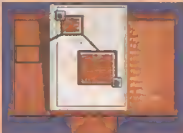
resting on the lectern. First of all draw out a white book shaped box, then use a thin grey rectangle on the left of this to simulate the spine. A little hand-drawing on the top edge and you should be able to curve the spine realistically. Add a single-pixel unfilled black rectangle slightly inside the edges of



A white rectangle, a polygon shadow, and the book is in place.

the book to give it a little detail. A very nice touch is the shadow cast by the book. This indicates that it is leaning at an angle, and is simply a filled polygon using the same colours as the dark brown lectern edges.

3 The wood begins to look more realistic now with the addition of a little grain. This is created by drawing a 3cm by 3cm image consisting of squiggly lines. Use the same colour as we did for the edge highlights on the lectern, and cut this out as a brush.



That's all you need, and to actually paint it on easily, we can call on *Brilliance*'s Stencil function.

4 Right click the Stencil tool (the letter S) to bring up the stencil requester. Now I know this can be a bit confusing, but here's how to protect every colour but one – and that's the colour we used for the lectern, which is so badly in need of wood-grain. Click on Clear to start with a clean slate, then click on Select, and click on the main lectern rectangle.



A quick way to simulate wood-grain – scroll brush, a stencil, and it's done.

You should see a white halo appear on the palette around the colour to show it's selected. Now click on Invert, then on Colours. The halo circles every colour EXCEPT your brown.

5 Select Freehand draw, and with your brush active, you can paint on screen now to your heart's content. Use the knowledge that you won't harm any of your drawing, paste the grain brush randomly on the lectern – remembering to leave a fair amount of the original colour intact – until you are happy with the woody feel of it. Best



A line of text is added. You can also see the start of the Animbrush showing a ribbon in place.

In mind, though, that it doesn't have to be perfect because it's only a background detail.

6 Switch off the Stencil with a click of the pointer on the S. Call up the Animbrush menu (click on the tool which looks like a movie camera) and enlarge 20 as the frame count (after clicking on the Set # button). We'll be doing some intermediate drawing work now, so press key J to move to the Spare screen. Draw out a ribbon-shaped long-and-tall rectangle for the bookmark, and add a few tassels on the lower end using the single-pixel freehand tool.





The ribbon starts to morph into our second brush.

7 Right-click on the A tool to bring up the text requester, and choose a medium-sized font (mine was 48pt). Draw two short lines of text, using your own names if you like. Cut out the ribbon as a brush, and with the darkest of the gray range of colours as your foreground, press the O key to outline the edges, so it can be seen better, and paint it back down. Do the same with the text, as it helps the letters to stand out.

8 Cut out the ribbon, and right-click on the Scissors tool to bring up the Brush menu, then click the brush into storage slot one (the first of the stamp-sized rectangles in the requester). Similarly, cut out the text, but place it in the second slot.



And it transforms, it moves to its new location...

9 With your text as the currently active brush, click up the Animbrush menu (right-click the icon showing scissors and projector together) and enter 20 in the Frames box in the Morph section, click on the small number 1 under the From section, to indicate you want the brush in slot 1 (the ribbon) to morph into your current brush (the text). This will take a while as the process completes. You should now store your Animbrush in slot 3 of the brush menu requester for safe-keeping (right-click on the scissors tool to access).

10 Switch back to your main drawing screen (key J), and call up the Path of motion menu (you can call it up by clicking on the Tweening icon, which looks



The text now becomes more recognizable as the animation nears its end.



...until it reaches his destination, and is reversed.

like a stack of papers, or press keyboard 3, which is the menu hot-key for animation). Ensure your Animbrush is currently active (if it isn't, retrieve it from the brush storage slot). Position the first call, which will be the original ribbon, where you want it on the book, and right-click the mouse button. Immediately do two things – press key U to return your image to the way it should be, and press key 7 to move the Animbrush back to cell.

11 On the path of motion requester, click on start, then brush to set the position you just registered. Now press key 8 until your Animbrush reaches the last call, which shows the text. Position this on screen where you want it to appear, and as in stage 10, Undo this action (U), and move back a cell (7). On the motion requester, click on End, and from Brush, to set the final position of the Animation. TIP: Space bar will clear the overcrowded menu clutter, and return it after you've finished drawing.

12 Click on Draw to see your Animbrush drawn on screen, beginning life as a bookmark, then changing over 20 frames to spell out the message – moving as it morphs. An elegant use of some very powerful features.

*Idea:* How about an outline map of a country morphing into its name? Or a seedling morphing into an oak tree to show stages of development?

## TUTORIAL 2

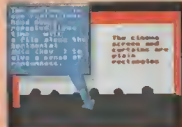
# DPaint

### CINEMA VERITE

**Object:** to simulate a movie theatre showing an old silent movie, to act as a title for your own art display or video.

**Mode:** DPaint, 32 colour low-res, default palette

It's a nice, ironic twist, to use the metaphor of a silent movie as part of a computer animation.



How the home cinema is built up: rectangles for the screen and curtains, and a filled freehand brush for the audience.



The show is about to begin.

It's also a doddle to do

1 Possibly the hardest part of the sequence is the movie theatre itself. But if you look closely at the illustrations, you'll see it's constructed purely of rectangles. First of all, select dark blue as the background colour (right-click on it in the palette) and clear the screen.

2 Draw a wide and deep mid-gray rectangle for the screen. Add thin red rectangles at the top and both sides for the plush outlining, and add a few



Cinema projector has started showing the first leader. Stop stamping these text!

toils to these by using a darker red, and the straight-line single pixel drawing tool.

3 Switch to the spare screen (I). To create the 'audience', select the freehand filled drawing tool, and using dark grey as the foreground colour, draw out the shapes of several heads on a block around 40m deep. Don't worry if they look like lumps – it's not very precise! Cut out these heads as a brush, and with mid-grey selected as foreground colour, press key O to outline them and give them a cinematic hair. Paint them in front of and below the screen, press key X to flip the heads brush horizontally, and paint them a few cms lower down the screen, slightly off-set from the first row.

4 Do the same again until you have a row of heads three deep. How's that for energy conservation?



The tension mounts as the film comes up an screen What treats are in store I wonder?



39



Look at the scribbles on this then

- 1 Tidy up the audience to give them straight left/right and bottom edges. Call up the *Anim/ Frames/ Sel #* menu, and create 25 frames based on this image.
- 2 A lot of the old movies began with a count-down of numbers, and if the projector was a bit dazy, the audience would see them. We can create that effect now. Switch to the spare page (key J), clear it and draw out a hollow mid-grey circle of around 6cm diameter using the medium round brush. Cut out the circle, and paste it on screen four times. Using a large font, add the numbers 5, 4 and 3 to a circle in turn, leaving one blank.
- 3 Cut out the 5 circle, and switch to frame one of the animation. Paint it down in the centre of the



Here's a quick guide to getting a nice, clear title for your cinema screen. Cut the brush, shade it then bend it.

screen. Switch to the spare screen again, and cut out the 4 circle. Switch to the animation screen, and position your new brush over the first one – but don't click the mouse button yet; advance a frame by pressing key 2, and now paint down brush two, which will be in the right place provided you haven't moved the mouse! Cut and paste the 3 brush in the same way, and use the empty circle for frames 4 and 5 of the animation (for some reason the numbers 2 and 1 are never used on the film leader).

- 4 Go to the spare screen, and clear it. You can now enter your text – I've used two items, a title *Home Movies*, and a credit by line. I wrote the text in dark grey, and cut it out as a brush, before going to the animation screen, outline the text by selecting black as the foreground colour, and pressing key o. Swap back to the animation (key J) with your first portion of outlined text; you should be on frame 6. Advance a frame (key 2) so there will be a 1-frame pause between the numbers finishing and the text appearing.

- 5 Paste down the text carefully on screen. Don't move the brush and press key 2 to advance a frame and paint down the text again. Now here's a novelty – I WANT you to move the brush a few mm up, down or from side to side

before painting it down. Do this for the next six frames. The reason is that it will make the text appear to jump, like an old film might in a rickety projector.

Do the same with the second portion of text, pasting it on screen until you reach the end of the animation. (Remember to move it slightly from frame to frame.)

- 6 Playing back the sequence now (key 4) shows a nice, clean effect. But we need to degrade it to give it a fake old feeling. To do this switch to the spare screen, and using the straight line tool draw streaks of around 6cm down the screen in light and mid grey – as if a comb with teeth missing had been dragged down the screen. These will be our 'authentic' digital scratches. Cut out the lines as a brush, and go back to the animation screen beginning at frame 1.

- 7 To protect your drawing from having scratches put in the wrong place, make a stencil of everything except the colour used for the screen, call up the Stencil requester – Effect (stencil/mask) and select the colours to protect. Click on Make Stencil. Now you can paint your scratch brush on the screen, just one click of the button to place the lines, then advance a frame (key 2) and move the brush down slightly and click again. Do this throughout the length of the sequence until you're happy with the effect. When you are, turn off the Stencil.

- 8 The showman-like lettering above the screen is fleshy and quickly achieved: while you're text on the spare screen, add a dark drop shadow and outline it before cutting it out as a brush. From the Brush menu, select Brush/bend/vertical, and push up the brush until it forms a nice curved arc. Place this manually on each frame remembering that the time the brush shouldn't move between frames!

**Idea:** Once your cinema is set up, you can indulge in 50 s style wipes and fades using different shades of grey. Or place a digitised sequence in that setting for a lovely effect.

## TUTORIAL 3 DPaint: PAPER MATE

**Object:** To mimic a sheet of paper turning over to reveal a message underneath.  
**Mode:** DPaint, 32 colour low-res, default palette, 20 frames.



Rectangles again – but it's what you do with them that matters



The pen, a nice touch to the image: is a combination of three gradient rectangles and single line highlights

A feature much-loved by dramatic movies (at times like calendar sheets flipping over) this is a simple version of the turning page effect. Although we do not curve the top sheet realistically as it turns, all the real animation plays and given the added difficulty, this is still a very competent and rewarding effect.

- 1 The blotter backdrop is optional, but you should try to do it for a couple of reasons; it provides a frame of reference for the viewer, and could be useful for other projects you might like to base around it. The basis is a large green rectangle which almost fills the screen, whose background is set to mid blue.



In perfectly this diagram, together with the detailed instructions, should help you create the initial wipe which leads the way in the turning page effect. Stick with it – it's worth the effort.

- 2 The cork effect is achieved by speckling local light shades of brown on a dark brown Scan square. Use the single pencil brush to dot speckles randomly, then cut out this area as a brush. Call up the Fill requester (Right click the paint can tool), and following that select From Brush and Pattern.

Now when you draw out a filled rectangle, it will be filled with a repetition of the brush. Draw a rectangle for the cork over the green as shown in the illustration, leaving 3 cm at either edge. Add a single pencil light green highlight line to the top edge and one to the inside edge of the right-hand side of the blotter.

- 3 The pen, another touch of realism, is made of two thin rectangles filled with a horizontal grey gradient. To select a gradient, call up the Ranges requester from the Colour menu and place a dark grey colour at one end of the placement bar, and white at the other. Then call up the Fill requester again, and select the horizontal Fill feature (click on the button showing arrows going left and right). The rib and gold pocket clip were drawn in





The blotter forms a steeper backside to the sequence. It is a filled rectangle using a small speckled brush as the pattern.

magnify mode, and are simply straight lines. Cut out the pen, and outline it in black (key it with black selected as the drawing colour) before placing it in an appropriate place on the blotter.

④ To add realism, using the magnify mode draw a dark edge to the right of the pen as it rests on the blotter. This creates a really great shadow and gives the pen a really solid feel to enhance the gradient highlights.

⑤ Now the background is complete, save it. We have other things to do now, and we need to clear the decks for the animation. Don't worry, we'll be loading it back soon.

⑥ Clear the screen to black now. Go to the fill requester and click on Solid. Draw out an A4-shaped white rectangle which will be our sheet of paper. Create 10 frames based on this simple image (Anim/Frameset # pull-down menu).

⑦ Go to the spare screen (j) and select the filled polygon tool, clear away the mess by pressing key F10 (return if the same way when you need it). For now we need to work on the entire screen area.

Draw a white polygon which starts in the top right corner, goes to the left bottom corner, moves 5cm to the right, then slopes upwards at the same angle as the first line to 5cm below the start of the drawing, then joins the start position. This is more difficult to explain than to do, a glance at this illustration should be a big help! This is our wipe tool, so cut it out as a brush, and go to the first frame of the animation.

⑧ Call up the line spacing requester (right click on the line tool), and enter 10 in the N Total box activate the N Total button before finally closing the requester.

Select black as the drawing colour, and press



The moving page turns, and uncovers a message just waiting to be read...

key F2 to turn your brush black. Select the line drawing tool, and place your brush at the lower left corner of the screen.

With your finger continuing to press the ALT key, draw out a line to the top left of the screen, and let go of the ALT key. The wipe brush will work up screen, one frame at a time, erasing portions of the white rectangle as it goes.

After it has finished you will need to tidy up the animation by filling with black the bits of white



Don't just make that out... Here how the underside of the turning page peels back and starts to overlap onto the blotter.

rectangle left BELOW the path of the wipe brush. Erase all traces of the paper after frame 10.

⑨ Phew! A quite complicated description, but if you followed it OK you should have an animation now which shows a rectangle of white disappearing gradually by being wiped from its bottom right corner to its top left.

⑩ We're going to add the 'underside' of the turn-



The message is almost uncovered.

ing page now. Call up the Stencil requester, and protect every colour EXCEPT the white used for the sheet of disappearing paper. Choose light grey as the drawing colour, and call up the Fill requester again and ensure the fill type is Colour.

The next addition to the drawing requires a little imagination. Go to frame 1. We're adding the 'turned' portion to the paper, so the amount of 'turn' should roughly be equal to the bit of the page that is missing.

So choose filled rectangle as the drawing tool, and place your crosshair where the bottom and right edges of the paper would have been, if we hadn't wiped them.

Draw upwards, and let go of the button when the top and left edges of your new rectangle are in the position from where the white paper has been cut.

Repeat this for each 'nibbled page', advancing



...and the top sheet disappears off the top left of the screen.

⑪ frame at a time by pressing key 2.

⑫ Do this for the remaining frames, overlapping the top left of the white paper as the turned portion becomes larger than the section which is left. To do this, turn off the stencil to allow you to draw on the background.

You will reach a stage where there is nothing left of the white rectangle, but you should still draw your grey rectangle, disappearing off the top left of the empty screen.

⑬ On the spare screen, draw out a red rectangle the same size as the white one we've just been animating, and cut it out as a brush. Go to frame one of the sequence, and call up the Stencil requester, protect every colour EXCEPT black, the background. Hand position the red sheet 'under' the white one, and paste it down on every single frame.

As the frames progress, you should see the white one uncovering the red one. Once all frames are completed, turn off the stencil.

⑭ Go to the spare screen and load in the blotter (remember that?). Go to frame one of your animation, and from the Picture/Spare menu, select Merge in back (American for behind), and tell DPaint to do it all frames.

You will see your blotter appearing behind your animation. We did it this way to avoid over complicating the animation process, and it is a technique you can use to make your life easier, building up an animation a piece at a time.

⑮ The lettering is up to you. You could well save the animation as it is now to be used as and when needed.

When placing the words, it's simply a matter of activating the stencil and protecting every colour except whichever sheet you're placing the words on, keep white unprotected for writing on that sheet, and keep the red unprotected for writing there.

A wordy tutorial - though no excuses. It avoids problems over uncertainty, and opens up more complex ideas for you to try, and to mould into your own needs.

⑯ You could have one picture turning over to reveal another. In this case you could actually cut out the 'turned' portions, and lip the brushes to create the underside of the actual image being turned. Slightly advanced - but we might even include it in a later tutorial. ☺

## NEXT MONTH

How your animation skills even further with Peter Lee's continuing expert guide to setting the maximum out of your point... um... you want to let your creative talents flow... then make sure you get a hold of next month's CU AMIGA.



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## NEW WB FOR ME

Having read your August issue, one small article leapt out at me — the news that Butterscotch were offering an official upgrade to version 3.1 of Workbench 1500 for my humble Amiga A1500. What does upgrading include? Does it matter that I don't have an AGA chipset?

I also have a GVP 030 50MHz Combo accelerator. Will this present any major problems should I choose to upgrade?

Mr. P. Taggart, Woolton Bassett, Wiltshire.

The upgrade kit includes a new Kickstart ROM version 3.1 (or two ROMs for the A4000/A1200), six disks and a set of manuals. It provides an operating system that looks similar to Workbench 2, but includes all the extras in version 3 (such as datatypes) and a few more nice bits and pieces (such as support for CD-ROM drives).

To upgrade the A1500, you will need to open the case, remove the old ROM and insert the new chip. You will then need to install the software by following the on-screen instructions. It should take half a hour maximum — the hardest part is remembering not to grip the ROM too hard and letting it spin round in your fingers and stab you. John has done this several times and it leaves an extremely weird scar.

The fact that the AGA chipset is not present in the A1500 is not a problem — in fact, it was partly for this reason that the upgrade was made available in the first place. Now there is a standard Amiga

Looking for trouble? You've come to the wrong place. The trouble-shooting Q&A team are here.

operating system platform and any Amiga, from the A500 up, can use Workbench releases 3 programs and utilities.

Even better, if you have a graphics card such as the Picasso fitted to your A1500 (which would be a very smart move on your behalf by the way) you'll now be able to open what was up to now AGA-only Workbench displays. The GVP accelerator should continue to work perfectly, so your A1500 will be almost identical to an A4000/030.

Unfortunately, the 3.1 ROMs will not work in the CDTV — although 3.1 contains CD-ROM code. The CDTV remains the only Amiga locked into Kickstart 1.3, so the relevant 2.04 ROMs never made it beyond developer status. Boo, hiss.

## FASTER (BUT NOT TOO FAST)



My Amiga set-up consists of an A500 computer, a GVP A500HD Impact Series 2 hard drive and 4Mb of

Fast RAM. I use it mainly for Desktop Video work and DTP.

I am interested in accelerating my Amiga with the Supra Turbo 28MHz card which plugs into the side expansion of the A500.

I would like to know your opinion on these types of accelerators, as I do not wish to upgrade to an A1200 as a lot of gear is not compatible with it.

I would also like to know if accelerating the A500 will speed up printing with Wordworth and PageStream. Thank you  
Francis Lave, Mosle, Malta.



**John Kennedy:**  
"Bah! My new 68040 turned out to be two 68020s glued together."



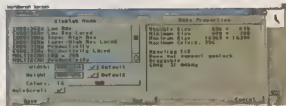
**Andy Leaning:**  
"Awfully sorry, I really can't ... talk now ... I ... just ... gotta ... go and ray trace."

It only GVP had kept their promise of upgrading the A500HD+ to the accelerated version there would be an obvious upgrade path to the much faster 68030 for you. Yes, the Supra Turbo will speed up your system but not by a very great deal, as the CPU remains a 68000 which is cramped by the 16bit memory bus. An A5000 020 or 65000 030 card would be better, these were manufactured in the UK by SBL. I have been using a secondhand one I bought for £50 and have never had a problem with it.

However, you really must consider upgrading to an A1200. The improved graphics capabilities will make your DTV material look a lot better, and the faster Chip RAM (it's now 32-bit thanks to the 68020) will speed up your DTP programs. There are several good degreaser programs which should help any stubborn old programs work with the new Kickstart, but best of all if you keep the A500 system you'll be able to use ParNet to provide your A1200 with a cheap (albeit slow) hard drive system.

Any speed-up system will reduce the time you spend waiting for these programs to print — although even with an A4000 you can wait a long time when fancy scalable fonts are being used.

All these new monitor types are possible with Workbench 3.1 and if you don't have an AGA Amiga, but have a graphics card you can now open Workbench display





## TOO SLOW?



I own a 1Mb A500 which until recently has worked perfectly. Now it has started crashing all too frequently. It may be a

coincidence but it only seems to happen with my 1Mb games.

Whilst looking through some coverdisks I found *Synths* and discovered that apparently my 68000 is running at 6.94Mhz (not 7.14) and my 512K expansion is actually Slow RAM! Please help?

Jonathan Sears, Essex.

The speed of your 68000 is within the margin of error, so don't worry about that. Also, your 512K expansion is indeed Slow RAM. Only the latest A500s had a new Improved Agnus which could address more than 512K of Chip RAM. *Synths* should be able to tell you which yours is. On 512K Agnus computers the extra trapdoor memory is called 'Slow RAM'.

If you have a 1Mb Agnus, you can enter the A500 to use the trapdoor as Chip RAM (more samples and more screen open at once) but as you only play games there would be no real benefit.

smaller than it should be and it is blurred. The computer shop that I bought it from has closed down and I can't get any help. Colin McKenna, Armagh, N. Ireland.

How small a display? Blurred in what way? Are you using a TV or a monitor? You should be able to see our problem here Colin - it's hard to tell exactly what's going on, but here are some guesses.

First of all, use the Preferences program called ScreenMode to change the display type to PAL HiRes in 16 colours. Save this setting. Next use the OverScan preferences program to centre the display and stretch it out the screen size as much as possible. Save these settings too.

You should now have a Workbench display that is at least 640 by 256 pixels big. If you want a large display, you can use HiRes Loco, which will double the display to give you 512 lines but at the expense of some flicker. These instructions will work if you have a TV or a normal monitor (such as a Philips KM8533).

If you have a multi-sync monitor use the DDPAL, Super72 or MultiSync Productivity modes instead for a larger and flicker-free display. Always remember to boot from the hard disk (not a floppy)

would you recommend for printing graphics? It must be easy to use - I tried *Deluxe Paint III* and could not get it to work.

Michael Foster, Chesterfield, Derbyshire.

You couldn't get *Deluxe Paint* to print? Bad news. I'm afraid it would be difficult to find something that is simpler to use.

Check the manual carefully and try again. Make sure you have selected the correct printer in the Workbench Preferences Printers program.

If you still are stuck, you might consider some of the Studio Printer software which is available from JAM, 75 Greenfield Drive, Uxbridge UB8 3QN. (tel: 01895 274440).

## COMMS QUERIES



I have owned my A500 for over three years, and have been reading your excellent magazine since I first got it. I

have recently become interested in Comms and have a few questions.

1. Is CompuServe a free phone modem number which comes with a monthly subscription?

2. Where can I get more information on CompuServe?

3. Do modem calls cost less than normal telephone calls?

4. What modem would you suggest buying to a first-time buyer? Also, what Comms software would you suggest I get?

5. Can you tell me of any numbers of Bulletin Boards local to me?

Now, finally, for a non-Comms related question

6. My ESCAPE button hardly ever works anymore. Can I fix it, or do I need a new keyboard? Simon P. Mailard, Carlton, Nottingham.

That's what we like to see - a loyal reader. Since you get CU AMIGA so often, I hope you have had the good sense to subscribe to it - If not let it now, and you can now save some money on the excellent Bruce Smith *Mastering AmigaDOS* 3 book (tel: 0923 694 355).

1. CompuServe do charge monthly (under various different schemes (or different users) but you also need to pay for connection time. There are local access points everywhere, but you still must pay your telephone bill

when you dial them up.

2. Ring 0800 289378 and ask for an information pack.

3. No, modem calls cost exactly the same as normal 'voice' calls. The telephone company don't know (or care) what you send down the line as long as you pay for it at the normal rate. Remember that BT's weekend cheap rate applies using boards further afield is a lot less painful at the end of every quarter.

4. Don't get anything slower than a 14,400 baud modem - the USBobolites Sportstar 14,400 FAX Modem is one of the best for beginners (see August's issue for a review). Recent reductions in price make it a bargain.

5. MacTel 0602-455417, The East Midlands Net 0602-445307, Derbyshire Hub 0602-445307, The Crypt 0602-445307. Noton 0602-455407 perhaps some of these will do.

6. Gently prise off the keypad and spray in a small amount of aerosol contact cleaner or WD40. If that doesn't work you'll have to contact one of the repair shops that advertise in CU AMIGA.

## COPY CAT



I give up. I know it can be done. It must be possible. I have tried but I still can't do it. I have read countless

books and tried to do it countless times, but to no avail. If you only have one disk drive how do you copy the music files from your brilliant coverdisks to a blank disk? It appears to have copied the files but then asks for the coverdisk back even when it is in the drive. Chas Miles-Chell, Stafford.

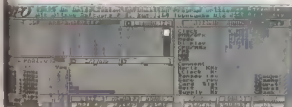
It's not (I'll tell you) really, Chas. The easy way is to make a note of the disk names and always use them instead of d0: (which refers to the current disk in the drive, not the drive itself). In other words, don't enter:

copy from: d0: to d0: to d0:

but something like:

copy from: CUDISK8:sound to MYDISK:

The problem is that the 'copy' command has to be read from disk before it can be used. You can get around this by making it resident, so



*Synths* is great at quickly identifying the cause in your Amiga, and also good for a quick indication of speed. Most other A500s will have a 512K Agnus, although this one has a specially enhanced 2Mb Quadchip chip fitted.

However, it sounds as though your memory expansion is starting to play up. If the RAM chips are in sockets, it is possible that a chip has worked its way loose slightly, so take the card out and press all the chips firmly.

You should also get 17 Bit Software (tel: 0924 365 982) to send you their disk full of diagnostic programs, which will test the memory thoroughly in case one of the chips is malfunctioning.

## SMALL AND BLURRY



I have recently bought an A1 200 with an 80Mb hard drive. The Workbench display is far

## EASY PRINTING



smaller than it should be and it is blurred. The computer shop that I bought it from has closed down and I can't get any help. Colin McKenna, Armagh, N. Ireland.

How small a display? Blurred in what way? Are you using a TV or a monitor? You should be able to see our problem here Colin - it's hard to tell exactly what's going on, but here are some guesses.

First of all, use the Preferences program called ScreenMode to change the display type to PAL HiRes in 16 colours. Save this setting. Next use the OverScan preferences program to centre the display and stretch it out the screen size as much as possible. Save these settings too.

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If you have a multi-sync monitor use the DDPAL, Super72 or MultiSync Productivity modes instead for a larger and flicker-free display. Always remember to boot from the hard disk (not a floppy)

and save the settings you make.

As far as the blurred screen display is concerned - well, that depends. Are you using the normal RF out into a colour TV? If so, the display won't be perfect and you will need to experiment with tuning the TV. Older TVs simply won't work well at all and there is not a lot you can do about it. If you have a modern TV with a SCART socket at the back, get a specific lead to connect the Amiga's RGB output to the TV. Most computer and game shops sell these for about £18 and they make a big difference



» which means it is stored in memory. Enter

resident copy

and see if that helps. Or you can perform the copy in two stages - firstly to copy the files to the RAM Disk like this:

copy from df0:sound to ram:

and then to the new floppy -

copy from ram: sound to my floppy:

Or from the Workbench drag the icon into the RAM disk, and then drag it to the new floppy. See? There are dozens of ways of doing it. You could even duplicate the original floppy with DiskCopy and then erase all the files you (that's enough ways thank you - Ed).

## BAD MEMORY



I have an A1200 with a Commodore fitted 80Mb hard drive and have some problems with the Amitek RAM

board from Since I kept crashing so I sent it back and got another one. This also didn't work. The third one I have crashes after about 20 minutes. An ICL engineer checked the computer, found no faults but replaced the motherboard anyway  
Chris Hill, Barnet, Hertfordshire.

Commodore didn't sell any A1200s with drives fitted - but that's another story. It sounds to me like a power supply problem, so try one with a little more oomph, such as one from an A500. For even more power (grunt, grunt) you could write up a spare PC PSU. You need +12 volts, +5 volts and -5 volts DC - nothing out of the ordinary.

## METAL BASHING



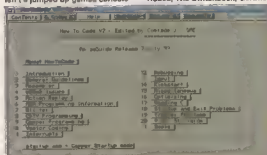
I've been programming my C64 since 1985, and I have a lot of experience of 6502 assembly language. Poor me, I

thought that 68000 programming would be nothing more than learning all the new hardware addresses. In December I bought an A500 but recently moved over to an A1200 with a 240Mb hard drive. I bought Devpac 3 and some books, but now I'm still next to nowhere because the only things these stupid books teach me is how to open windows and stupid stuff like that

Isn't there something decent available like the C64 Programmer's Reference Guide? And what are those Native Developer kits? They sound just what I'm looking for - but I'm not a native  
Pietr Frensen, Hesseit, Belgium.

Ah, Pietr - a common problem and one which has caused a lot of problems for many budding programmers. The Commodore 64 was actually rather a simple beast to program, with all the work done by assembler chips which could take a good poking in order to work.

The Amiga on the other hand, isn't a jumped up games console -



It's a computer with a superb multitasking operating system. There are therefore two ways of programming the Amiga.

1. Pretend it's nothing more complicated than a games console and poke at the registers until they squeak.
2. Use the operating system to take off everything.

Now, technique one is initially very attractive but you soon come across problems. First of all, there have been many revisions and improvements in the Amiga custom chips and if you dive in and write a game for the A1200, you will find it falls over totally on an A500 or an A4000. Secondly, if you want to write games which will work on new hardware - say the CD32 - you can't possibly know whether your program will work.

It is you use the second technique, you can be sure your program is completely Amiga-friendly. Contrary to popular opinion this doesn't mean that it has to be deadly slow and written in C without any fancy coprocessors but you do have to request the resources from the operating system first. A game written properly in this way will work on any Amiga and be able to make use of advanced features present on new hardware platforms.

Blitz Basic is an excellent language with which to learn about the various Amiga hardware features available, and you can also integrate 68000 code directly to speed things up (Blitz has an integral assembler). However, if you insist on basing the hardware directly, keep a look out for the file HOWTOCODE7 by Comrade J which will provide you with all the register addresses you'll need, and also some handy hints on being nice to the operating system all the same time.

The Native Developer kit (available from Sharon McGutha, Commodore UK, Commodore House, The Switchback, Gerdner

libraries, you should be able to get away with 8 to 10Mb for the Workbench partition. The Workbench partition will take up the rest of the drive. It is not usually worthwhile creating more partitions as each one consumes some precious memory. If you feel you need more organisation, create a drawer and leave it out on the Workbench where it can behave like another partition - without using RAM. Remember that if you run out of space, other SCSI drives can easily be connected the SCSI port at the rear of the HDs+.

The GVP HDs+ has four SIMM sockets, so get two 1Mb SIMMs to start with (they should cost less than £30 each) and another two when you can afford it.

## VIDEOSTUDIO FIXED



I was sorry to read in April's CU AMIGA that you wrote off VideoStudio v3 for the A1200 when replying to W. W.

Windsor of Winslow. It works very well on my A1200. Indeed even better than it did on the A500.

VideoStudio is set up on two disks (VS1 and VS2) for use with Workbench 1.3 or Workbench 2 but does work perfectly with Workbench 3 if a few small changes are made on the VS1 disk.

Details the following: C, Devs, L, Libs, S, System, Go, 1.3, Install 1.3, Install 1.3info, Install 2.0 and Install 2.0 info

Rename Go\_2.0 as GO

Remove the boot block (from Shell type  
INSTALL DF0: NOBOOT)

Copy Pref/OverScan and its Info file from Workbench 3.0 to the root of VS1 but renamed as Preferences and Preferences Info

Copy the Translator library to Workbench3Libs from Libs in either Workbench 1.3 or 2.0.

Now boot from the Workbench 3.0 and insert both VS1 and VS2 into the drives. Click on the VS2 and the program should run.

To run VideoStudio from a hard drive, just copy VS2 and the modified VS1 into a single drawer on the hard drive named VideoStudio. Assign both disks as given in the manual, alter the default tool on the Link icon to identify the new path for GO and that's it! I hope this will be helpful to those who, like me, find VideoStudio a versatile and useful video utility.  
Peter A. Long, Stanway, Colchester

Changing code is not to be taken lightly. It may be copyrighted or could go wrong if you're not careful.

Road, Maidenhead, Berks SL6 7XA. Tel: 0253 770068) costs £23 and contains disks crammed with the details you'll need to program the Amiga properly. There are testing and debugging programs, new v3.1 includes for assembler and compilers and lots and lots of advice.

But whatever you do, remember the Amiga isn't a games console or a C64 - it's an Amiga, so treat it with some respect.

## DRIVE DILEMMA



I am planning on buying a GVP HDs+ Hard drive for my A500+ very soon. I would like your advice on how to

partition the drive - in other words, how big the partitions should be. Also I could probably only afford a total of 4Mb of extra Fast RAM in the drive, so I'll bought 2Mb now and 2Mb later, what combination of SIMMs would I need?

Adnan Huseain, Edmonton, London.

The standard way of setting up an Amiga hard drive is to create two partitions: one called Workbench (for all your Workbench stuff, stuff, stuff) and the other which is called Work.

Unless you plan on having an extremely large number of fonts or



1980. Important areas and abundance were defined. Please refer to appendix in the atlas volume.



# HELP IS AT HAND



**John Kennedy is your guide to everything you ever wanted to know about the Amiga but were afraid to ask.**

## GENERAL QUESTIONS

**Q.** Can I switch off the power to my Amiga at any time?

**A.** Not! You shouldn't switch off the power supply unit until the disk scores light has gone out. This applies to both floppy drives and hard drives. Some games will keep the light on permanently—in this case wait for a couple of minutes to ensure the disk isn't being accessed and then remove the disk before switching off the power.

Always use the switch on the power supply unit, and switch it off at the mains when it is not in use.

**Q.** When playing games my Amiga doesn't seem to have any sound, why not?

**A.** The Amiga doesn't have any speakers built-in, instead there is a stereo sound output (MIDI) res: just tie with a hi-fi separate CD player. You can buy small battery powered speakers to connect here.

Some monitors come with speakers which you can take advantage of by linking the output of the Amiga to the audio inputs on the monitor. If you are using your Amiga with a Television set and RF output (or with an external modulator) the sound will come from the TV's speaker, if it doesn't, check the tuning and volume settings of the TV.

**Q.** What actual difference does using a computer monitor make?

**A.** A dedicated monitor will provide a much

better display, it is generally crisper and sharper. If you have an A1200 or an A4000 and a particular type of monitor known as a multi-sync or dual scan, you'll be able to display quite a lot on screen at the same time.

**Q.** How do I program the Amiga? Is BASIC built in?

**A.** There is no language built into the Amiga. Instead, you will need to buy a package, such as *Bilz Basic*, *AMOS* or *HiSoft BASIC*.

## KICKSTART

**Q.** What is Kickstart?

**A.** Each Amiga has a chip called a ROM (Read Only Memory) inside it. This chip contains information the Amiga needs to operate, part of this is called Kickstart. Amiga 500s come with Kickstart 1.3 or 2.04, Amiga 600s have Kickstart 2.05 and A1200s and A4000s have Kickstart 3.0. Kickstart 3.1 is now available as an upgrade to all these machines.

**Q.** Why don't some older games work on my A1200?

**A.** Some games use quirky routines in the older Kickstarters and can't work with Kickstart 3. The A1200 also has new graphics chips (called the AGA, or Advanced Graphics Architecture, chipsets), and again some games won't work. A few games fail because of the tester processor in the A1200 which causes timing problems for the games.

If you can't get a game to work, you can try holding down both mouse buttons when you switch on and switching OFF the processor caches and selecting the original chipset from the menu that appears.

Sometimes a program such as *Degradre* (available from any Public Domain library) will also work.

**D.** How can I change my Kickstart?

**A.** The best way to change Kickstart is to buy an official upgrade pack. You can get an upgrade to 2.04, and recently version 3.1 has become available.

To perform the upgrade you will need to replace the ROM inside the Amiga. This upgrade will probably be of use to A500 and A2000 owners.

## MEMORY QUERIES

**Q.** How can I add more memory?

**A.** The A500, A600 and A1200 have special trapdoor expansion slots. You can buy extra memory on cards which fit into these slots to increase memory.

The A500 and A1200 can also use PCMCIA memory cards, although these are both quite expensive and relatively slow.

The A2000 will require a memory expansion board, but the A3000 and A4000 can have

memory fitted to the motherboard without an extra card.

**Q.** What is Chip Ram and Fast Ram?

**A.** Chip RAM is special memory used for sound samples and graphics. Fast RAM is normal high speed memory used for programs and program data.

**Q.** What's the PCMCIA credit card slot for?

**A.** The PCMCIA slot can be used to add memory, hard drives, CD-ROM interfaces and video digitizers to the A1200. The A500 also has a PCMCIA slot, but there are fewer peripherals for it—see page 95 of this issue for a review of Smart Slot—a PCMCIA peripheral.

## DISK DRIVES

See our lead feature this month for more information on disk drives.

**Q.** Why do I need to load Workbench from disk?

**A.** For total flexibility the Amiga keeps most of its operating system on disk, and loads it in when needed. Although it can be very slow when used with a single floppy disk, it works extremely well with a hard disk drive.

**Q.** What is a hard disk drive?

**A.** A hard disk drive is an extremely large capacity disk (usually from 20Mb to 2,000Mb—a floppy disk holds less than 1Mb) which works extremely quickly.

Other than that, the hard drive acts like a huge floppy drive and can be used to store various items such as Workbench, Amiga programs, data and some games.

**Q.** How can I add a hard disk drive?

**A.** Adding a hard drive to an A500 requires a single clip-on unit that attaches to the expansion port on the left-hand side of the machine. These drives are usually made up of IDE SCSI standard. The A600 and A1200 have IDE interfaces built-in, and hard drives can be fitted internally. It's also possible to connect hard drives to these computers via the PCMCIA port. The A2000 requires an interface card and drive to be fitted internally. The A3000 has a SCSI interface built-in, and the A4000 has an IDE interface built-in.

**Q.** What is a CD-ROM drive?

**A.** A CD-ROM drive is like a disk drive which works with CD-ROM disks. A CD-ROM will hold about 600Mb of data.

## ODDS AND SODS

**Q.** I have an A1200, where are the manuals?

**A.** The A1200 doesn't come with *AmigaDOS* or *Arxx* manuals. If you need them, you can either buy some third-party manuals (try Bruce Smith Books tel: 0923 894 355) or get the 3.1 Kickstart upgrade which includes manuals.



# COMMS

Chief cybernaut John Kennedy serves up another volley of words on the global network that is Comms.



## WIRED WORLD

Summer is traditionally a lot slower in Comms land, as most sensible people refuse to pack a portable computer and a battery-powered modem in their suitcase as they nip off on holiday.

That said, there has still been plenty of news and gossip (mostly about CBM) floating around the networks and it would take a long, long time to sit down and read everything which has been posted in the FidoNet echoes or Newsnet comp.sys.amiga.\* groups.

### TRAPDOOR 1.85

No sooner does *TrapDoor 1.84* come ailing and get a plug in the September issue, when along comes *TrapDoor 1.85* to fix a few lurking bugs. This patch file (you need 1.84 in order to use it) is available from the Internet or most other BBSs in the country — including the CU AMIGA information Vault.

*TrapDoor* is a mail packing program which is used in conjunction with a reader like *SpotIt* to read FidoNet mail and echoes off-line

messaging area. If you can't, ask the board's Sysop to get it for you — it's on the FidoNet Backbone which means it isn't hard for him to get hold of it on your behalf. When you gain access, it's your chance to discuss whatever you want about your favourite Amiga magazine, so don't be afraid to say hello.

### PROSE&VERSE AND DEV DISC

*PROSE&VERSE* is like an electronic poetry and prose (either factual or fictional) magazine where anyone can publish without the fear of being laughed at... unless of course they read *P&V DISC* where works posted in *PROSE&VERSE* are freely discussed and analysed.

The two echoes are already available from several systems and the moderator Matthew Ravenel (2.258/501 0) is waiting for information on backbone status. Matthew's board is the largest mail station in the North East of England — well worth investigating.


And there's more... Other echoes worth hunting out include: *CHES* (for playing games via

electronic mail) and *MOTORBIKES* (lots of chat on leathers and chain lube — kinky stuff).

### COMMS NEWS

Two excellent pieces of news for CU AMIGA readers this month. First of all, the CU AMIGA Information Vault is open. This is an area on a BBS which contains the various freely-distributable files which have been in the magazine.

The primary vault is situated at the Heart of Gold BBS (tel 0247 274919 — thanks to Sysop Colin Turner for donating the space) but other Sysops are more than welcome to mirror the site. Please contact Andy Leeming at the CU AMIGA office so we can keep a record of the Boards involved and publish their numbers.

If you are setting up your own BBS please roll down all the details and send the details to CU AMIGA, Priority Court, 30-32 Farringdon Lane, London EC1R 3AU or Email to us at CUAMIGA@clx.computink.co.uk. Would the woman who phoned us about her son's BBS please contact us again. 

### FIDO UPDATE

#### AMIGA MAGS

ZZZZzzzz... Cor blimey, everyone seems to be asleep in the Amiga\_Mags echo. Mind you my net lead went down for a while so I might have been missing everything — I hope there weren't any more comments about my ears. Just a reminder that if your local BBS is part of the FidoNet system you should be able to access the Amiga\_Mags

### PLUG CORNER

Here are some plug and... and... and...

Name	On-line	Modem number
<b>BARK SANATION</b>	1	5100
<b>GURU TEN</b>	1	5034
<b>GURU TEN (2)</b>	1	5034
<b>THE MOTEL</b>	5	5034

**Group**

Andrew Miller

Chris Smith

David Smith

Neil Bates

**Comments**

Not new

1 needed BBS

Amiga/Dev emphasis

to of Amiga



# SOUND LAB

## YAMAHA QY8



**Pocket-sized sequencing that actually fits in your pocket! Tony Horgan takes Yamaha's QY8 for a rail trip around Britain.**

I really like the idea of making music any time anywhere. Inspiration can strike when you're sitting on the train, or watching your Y-fronts go round at the launderette. By the time you get home, you've usually forgotten the potential masterpiece you'd just mentally composed. That's where Yamaha's QY8 comes in. Metaphorically speaking, it's been designed as a kind of pocket-sized bottle for your creative juices, if you like. You can pour all your ideas into it while they're fresh, put the top on, and open it up again when you get back home. Literally speaking, it's a portable sequencer and multi-instrument sound module rolled into one. The idea seems to have been to produce a cheaper version of the similar QY10 and QY20.

### NO KEYBOARD

There's no keyboard! Considering this is a musical instrument, the lack of a keyboard is surprising, and also a little off-putting. However, it fits comfortably in both hands, and feels just like a Game Gear. All the parameters on the LCD screen are controlled by 12 rubber buttons. Notes are entered by moving a dot up and down a minuscule slide, and pressing Enter when you get to the right note. The slide display then automatically scrolls off your entered note to make way for the next. This is unless you are in chord mode, in which case you can enter all the notes of your chosen chord before moving on.

### SING-ALONG-A-STYLE

The composition process is based around preset styles and accompaniments. Yamaha envisage QY8 users selecting a style (dance, rock, rumba etc), and then building on this to create their own tracks. This is fine if you don't mind your ideas being colonised by the predictably auto-accompaniments, but it's not much good if you want to write some basic tunes from scratch. However, you can mute the four backing tracks, or select a 'blank' style, leaving you to compose with the remaining four. You'd be onto a winner if you wanted to go busking on Blackpool seafrost.

### SOUND QUALITY

AWM samples are used for all the instruments. AWM (Advanced Waveform Memory) is Yamaha's 16-bit sound generation system that's used in their PSS series of home keyboards. There are no effects, no filters, and no oscillators to mess around with. Even so, the sounds themselves are clean, and cover the main areas (drums, bass, chords, lead, guitars and brass). The drum kit is

surprisingly good, with solid kicks, and quite a selection of percussion sounds, including a few TR-808-style noises. It's hard to believe they're all coming out of something this small!

The MIDI ports at the back allow you to hook up the QY8 to an external sequencer or MIDI keyboard. This way, you can play up to 8 of the QY8's sounds at once, without having to use the extremely awkward built-in sequences. Fami of the sounds are dictated by those used by selected style - you get to choose the other four yourself. You can also use a MIDI keyboard to enter notes when using the built-in sequencer.

### FIDDLY SEQUENCER

There's stacks of potential in this little box, but it's looked away behind one of the most finicky sequencers ever devised. The stage section of the screen can only show one note or chord at a time. Once you enter a note, it's scrolled out of sight to make way for the next, so you never get a visual representation of the melody. To make matters worse, the slide can only show two octaves, so when you move above or below the current octaves, the note cursor jumps back up the display, which is now representing higher or lower octaves. This is all very confusing.

Trying to program a drum beat is hell. The note cursor moves to notes that are in the specified key signature, but the drum sounds are spread right across the range of notes. This means that to enter certain drum sounds, you need to find the note next to the one you want, and then go and change it to a flat or sharp. If you want to enter more of the same sound (a high hat line for example), you have to repeat the process each time (although you can copy and paste sections to save time).

Also, there's no indicator that tells which note you are on, so if you're not so-lit with sheet music, you can spend ages just trying to find the right sound, and then have to go back and delete all the wrong entries you had to make to try out all the sounds along the way. The sequencer has a list of frustrating features and omissions as long as your arm. A bit of a joke really, when it's supposed to be a spontaneous composition tool.

### CONCLUSION

The QY8 is very nearly a brilliant little music box. What it needs is a mini keyboard, realtime note entry, and a basic sequencer that's easy to use. Removing the keyboard (from the original QY10) will have kept costs down, but it's had a devastating effect on the usability. If the guts of the machine weren't up to much, it wouldn't be much of a loss, but it's really a very powerful unit, considering its size and price. How about a revised musician-friendly QY8 Mk 2? **TD**

### QY8 SPECIFICATIONS

Price	£225
Stereo sound	mini-jack socket
Pitched voices	40
Drum sounds	51
Polyphony	28 notes
Multitrack	8/16 parts
MIDI connections	MIDI In & MIDI Out
Power	6 AA batteries or 11.5 V mains
Dimensions	188 x 104 x 33.5 mm



# PC REVIEW

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### Sid Meier's Colonization

It's been a long time but the follow-up to Civilization is HERE, and it's reviewed ONLY in PC Review!

### PLUS

• Why buy a new PC when you can rent? It could work out more cheaply - we explain how.

• The future of sound: we look behind the scenes at Creative Technology, the people behind the Sound Blaster.

• Give your sound card the speakers it deserves - four sets of speakers reviewed and rated in our definitive test.

- Who owns who? How the PC games publishers are slowly but surely becoming part of Hollywood - a special PC Review investigation.
- Be the first to play MicroProse's Transport Tycoon, with PC Review's special cover disk extract.
- All this and a free CD-ROM on the cover, too. This must be PC heaven!

**PC Review October 1994**  
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**PC REVIEW**



# BACKCHAT

**Don't give us any lip. Just write it down and send it in. Go on, we dare you.**

## AMOS?

I was pleasantly surprised when I tried to save GU AMIGA's July coverdisk game 'Valhalla And The Lord Of Infinity'. Why? Because when I did so an AMOS requester popped up on the screen, saying that the disk was write protected. Gosh, was I surprised! Not because the disk was write protected, but because the program was written in AMOS! Or am I wrong? If I'm not wrong, then this must be the best program ever written in AMOS. Anders Bakkvold, Høugesund, Norway.

You're not wrong Anders, *Valhalla And The Lord Of Infinity* was actually written in AMOS Professionals! In strict no time at all. You're also right in pointing out that it is really the best game ever written in said language. The mere fact that most people just didn't spot it was an AMOS game says it all when it comes to the ingenious design.

## COMMODORE NICE?

Having read so much about AMIGA owners' complaints concerning Commodore UK Ltd's customer service, I felt I had to put the record straight and relate my experience to you and your readers.

I purchased an A1200 last December and only recently I had a problem with the supplied software. Workbench 3.0 and DPaint 'Art 1' disks. A telephone call to Commodore's customer services resulted in prepaid address labels arriving the very next morning and just seven days later replacement disks arrived. Commodore not only replaced the faulty disks but the entire DPaint and Workbench set. I think you will agree that this is very good service and should receive recognition as such through your columns. Keep up the good work. Peter Harrison, St Leonards On Sea.

Well readers, has anyone else had similar good vibrations from Maidenhead? It just goes to show that even a big company like Commodore values its customers.

## USA FIGHTING BACK

Is it me or are all the other console, PC companies and users' gangling up on the Amiga? How much longer is it before these people realise that the Amiga is here to stay alongside their machines. They boast about how great their machines are and how they like and that, and then they rubbish the Amiga saying, 'oh the Amiga is crap, it's so slow no-one uses it'. Well, think again.

I'm not denying that there are more powerful machines out there. But why can't they just stick to their machines and be happy? If a computer does what you want and you're happy, then that is all there is to it. Who cares if my Amiga 500 is not as fast or has less colours than a SEGA Saturn or 3DO. They must be so insecure about their own machines that they have to slam Amiga users at every chance. Perhaps they are actually jealous.

Look, they can keep their CD-ROM, DSP chip, Fractal, light source, blah blah blah. Their games just don't cut it for me. I've played games on many machines and the majority of Amiga games are usually superior in playability. The only decent games on other formats that aren't Amiga conversions are *Alekhin* and *Streets Of Rage 2*. The Amiga programmers are just about exhausting its capabilities, hence the recent standard of excellent games being released. The new releases on other formats, however, are just the same old ideas with flashier presentations.

There is an advert for a PC magazine that says the PC is the greatest games machine ever. KKKKEERRRAAAPPPII The machine can't scroll for peanuts (the Commodore 64 leaves it for dead for Pete's sake). Soundblaster is nowhere near as good as the Amiga's sound (forget specifications, just listen to both of them) and Sensible Soccer on the PC just didn't match up to the Amiga version. And, isn't it interesting that Sensible Software always develop their games first on the Amiga?

Tell me PC owners, which machine is used to do the graphics for *Babylon 5* or *SeaQuest*? Which computers are TV networks using to

produce promos and graphics on? Which machine has the best operating system? Poor PC, all those specs but nowhere to go, such a boring machine. Look, console and PC owners enjoy your machine but just don't rubbish Amiga owners. The Amiga is my favourite machine. So kindly shut up or else we will get nasty and tease you with a copy of *Sensei Soccer*, *Goal!* or perhaps *Workbench!* Wayne Peails, Kilburn, SA.

Strong words indeed, but there will always be rivalry between machines when it comes to magazines, something that I personally have always found a little sad. Your advice is spot on - be happy with your own machine. If it does the job you wanted it to do, then what's the problem? Stick with the Amiga mate!

## SLAP HEAD

I am 40, fighting a losing battle against being a slap head, and have a 50% share of an Amiga 1200 with my 10-year-old daughter. I was one of the few sold and purchased an MSX computer and have lived long enough to witness a program load by cassette so as you can imagine working with the A1200 is like comparing a Trabant to an F1 Racer.

Now, apart from being lost at the endless applications available to the Amiga as well as being computer illiterate I have come across a major problem. To wit, I have tried to follow the *Amiga* tutorial to GU AMIGA every month but I cannot get the following characters to type out: " ". When I try it turns to an @ and a small star " ". Is there any hope for me at all? Be gentle with me. Nice and slow - no lancy computer speak. Ed McCann, Belfast.

Your problem is a fairly simple but common one. Because the Amiga is sold all over the world the operating system (Workbench) from all over the world. Unfortunately, it is preconfigured for American keyboards which are subtly different to UK versions, in some of the keys are in different places. The perfect example of this is that when you press the key that has the 'characters on it it thinks you are pressing the

## TEAM TALK

**Everyone needs companionship. Some people have pets but Andy Leaning? No. Our Andy's different (and richer according to this version of events) ...**

### ALAN DYKES



I couldn't help noticing that there was something strange about Andy that day. He didn't have his usual devil-may-care attitude and there wasn't a single egg sandwich in sight. He also hadn't made his usual early morning comments about minnows, the Internet or 3D modelling, in fact he didn't say anything at all.

### LISA COLLINS



I was too busy with my torture implements to notice anything at first but on reflection Andy's face was definitely rather than usual. Then I thought "that's odd, he looks as though he's just about to explode" but being a conscientious sort of person I berated myself with the hammer once again. All was quiet, when suddenly, out of the blue ...



## THE FAR SIDE

By GARY LARSON



"Be, Professor Redoubty, you're saying that your fellow researcher, Professor Lazzari, knowing full well that balloons can never fly, contacted to be threatening, handed you this list on that tinfoil they you emerged from your Serengeti compacts."

key that has the @ symbol on it because that's what I have on my keyboard here on this key. Getting around this is very easy. In your Preferences drawer double click on the 'Input' icon. This will allow you to change the keyboard type from US to British (right-hand side of the keyboard). Having clicked on the British option click on the save button at the bottom of the requester and reboot your Amiga. You should now be able access those keys you've been missing. The @ character is produced by holding down the shift key and pressing key 8 along the top row.

## F1 FRENZY

Like many people, I suspect, I find Formula One Grand Prix way too easy. However, it is possible to make the game a bit harder by speeding up the cars with the help of the PD program Newzap. On the F1GP program two disk there is a program called 'f1gp'. This is the main program. Using Newzap, first block 940 of this program.

The information controlling the cars' performance is at cursor position 140. Each team's speed is represented by two bytes. All you have to do is increase these numbers and bingo—the cars are much faster! There is a limit to how fast the cars can go before they slow down again, but even an increase of 40–50% should make the cars lap times

give you a good run for your money.

The data regarding the driver's racing and qualifying skills is at cursor positions 168 and 190. By lowering these numbers you increase the driver's ability or make them all FF and watch the drivers spin off at every corner. Robert Newman, Wolverhampton.

What! The Rob (or Bob) Newman. The funny one? Personally, I never expected one of the blokes from History Today to know so much about hacking into games, but there you are. There is also a piece of PD software that allows you to edit the game from a simple front end, rather than going through a whole series of meaningless figures with a disassembler.

## TEAM 17 REPLY

In response to your letter from Alan Heywood (Letters, September CU AMIGA 1994), sure, we would be the first to admit that disk accessing using an Overdrive on the Amiga leaves a lot to be desired, but if Alan had studied your review before purchasing that game, he would have been forewarned about this. Also, as you stated in your reply, we are resolute in our support for the Amiga. Marty (Creative Director) and myself both have Amigas on our desks, and we do much of our work on them.

Alan seems to be a little obsessed with Team 17's actions in the PC market while ignoring the fact that some other much-championed ex-Amiga developers have totally abandoned our great machine in favour of other platforms. Our Media Manager, Alan Bunker, protested strongly when the PC magazine *Mc* Heywood refused to market that we were reducing our commitment to the Amiga. That sorry tale true. Wait until you see what we've in store for the Amiga in 1995! Whilst we sponsor that [PC Home] page by giving our games as letters prizes, we have no control or prior approval on its editorial content.

On the subject of HD Installability and Team 17, games like *Alien Breed 2* and *Body Blows* AGA were both HD Installable. *Tower Assault* and *Super Starhead* will be too. This has only become feasible with the A1200. Making a game HD Installable involves using the operating system, which takes memory. Since most of our games are technically demanding on the machine, making the games HD installable on machines with less than 2Mb would involve making compromises in the gameplay, which we are not prepared to do! Marcus Dyson, Development Co-ordinator, Team 17.

And there you go. Straight from the, er, horse's mouth. Team 17's original lie in Amiga development and they are proud of the fact that they are still supporting the machine. Most companies need to evolve to survive, and this means producing games for more than one platform.

## LETTER OF THE MONTH

## AN AUSSIE SPEAKS

What is happening? The Amiga is out for the count in Australia. I mean look at it, Commodore Australia was liquidated earlier this year, and it looks like others will follow. On top of this, there have been rumours everywhere about Samsung taking over the whole show. Is the UK the last stronghold for the Amiga? I wish Samsung (or whoever) is taking over Commodore International, would hurry up. The longer it takes the worse it will be for the Amiga. I predict that it will take a lot for the new owners of Commodore to get the Amiga back on its feet again. Even if we are optimistic and say that the Amiga will live, in Australia it won't be any good because you probably won't be able to buy much software (let alone games). You see, they're bringing in a new law to classify all computer games. For every game title that is imported, there will be a fee—this makes only the biggest-selling games worthwhile importing. If the Amiga makes it through, well, I see an Amiga owner living in NSW have to order games from the UK? It's not a nice predicament.

In hindsight, you can point the finger for the demise of the Amiga at two main causes: Commodore themselves (for marketing bungles), and all those horrible software pretens on there—not only making games more expensive but also helping to discourage would-be Amiga developers (eg the Australian team SSG who are not making an Amiga version of *Warlords II*, surely the coolest strategy game ever).

In summing up, I purchased an Amiga 1200 with a 200Mb hard drive three months ago (and being a poor student, that was a big investment). If the Amiga goes down for good, will my hard disk always be only one third full? (No, I don't want to fill it up with pictures and Protracker modules, besides, I have already got enough.) I sincerely hope that I (and every one else) will be able to go out and buy a Christmas hit for my Amiga this year. In other words, Commodore may be dead, but the Amiga (let's hope) is not dead and will make a big comeback worldwide. Harley Kingston, NSW, Australia

This is just one of the letters we are currently receiving from all over the world from concerned Amiga owners. It's quite disconcerting to hear of the import tax levied on computer games in Australia, as I have always felt that Oz is a largely untapped wealth of programmers and artists. (ag Acid Software). Hopefully, very soon, soon this whole mess will be cleared up. Check out the news this issue for the latest developments.

## TONY DILLON



It was a tough day, I had spent the entire night before out with at least three international heavy metal rock stars including, I believe, Alice Cooper, who lent me the last four

home I was on my way up the road to the office with Claudia Scheffer draped on my right arm and the McPherson on my left when I caught the, er, small...

## TONY HORGAN



"Cur", I thought in my dirty Middlesex manner, "small is like someone's doing a leg fly up on our floor (of SHAW Towers)", but wait! No! It actually smells like barbed wire

hairs and, yes—again! What could it be? I took the headphones off of my earbuds and heard nothing. A spooky silence had engulfed the home of CU AMIGA.

## JOHN KENNEDY



I had never seen anything like it, the whole office was covered in a sort of yellowish-white slime and there, in the middle of it all was Andy, smiling, with tears rolling down his

cheeks and a big hole in the butt of his trousers. "Here Jimmy," he said and made crooning noises in the direction of the darkest corner of the room.

## ANDY LEANING



What a load of old farts over nothing. How was I supposed to know it would happen like that? Anyway I'm about to become world famous and the rest of them can go to hell. Why did they think I was sitting all those songs down for anyone? Why? Because I've just invented and given birth to an organic BASH chip. I'm not! He hal







# CU AMIGA: WHAT NEXT?

**W**ow! You won't believe what we've got lined up for you next month. It's stupendous, enormous, fabulous, and all other complimentary words ending with 'ous'.

Unfortunately it's so big we can't tell you what it is. Instead we'll give you a few tasty teasers. It's a news story and a lead feature - yes it's that big! And it will directly affect you and your trusty Amiga... yet another fabulous CU AMIGA exclusive!

Supporting this amazing feature, we'll also have 101 SECRETS OF THE AMIGA, a round up of Amiga utility software and masses of technical reviews, news and previews.

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# PACKAGING BLUES

Andy Leaning rants on about the importance of good-quality packaging and the perils of dull, brown boxes!



Just two examples of good quality packaging. Suppliers take note.

**W**hy is it that in the Amiga peripheral market there are companies, admittedly not many, who will spend bags of money developing a product and then forget about the software and packaging. They distribute their technologically-astute new product in nothing more than a brown cardboard box and then wonder why it fails to sell in any great quantity.

Even when you find a company that has obviously gone to some length developing their product they invariably let it down with crap packaging, shipping in just a brown box, or including a flimsy photocopy as a manual. Or even worse, don't bother supplying at all that is needed – a certain company springs to mind who recently shipped us a plug-in peripheral for the A1200 but didn't bother to include the software needed to use it or even the 3volt power supply (without which it wouldn't work).

Honestly, if you had spent many thousands of pounds developing a product wouldn't you want the packaging to reflect all the hard work that you put into developing it? After all, no matter how spectacular a piece of equipment is, if the packaging is poorly put together then most customers will probably assume that the product itself has been thrown together in a similar fashion and so will shy away from buying it.

Don't get me wrong, there are many Amiga

developers who go to considerable lengths to include everything needed, write decent manuals for their products and spend many thousands of pounds on the design of the product. Some of the best known, GVP, Blizzard, Power Computing and Amitek all immediately spring to mind.

But there are many other companies who don't ship shoddy looking products. Yet when you speak to them about it they don't seem to realise that they are letting not just their customers down but also themselves by doing so!

## WHY, WHY, WHY?

So why do they do it? The obvious answer is cost, producing colour packaging, proper manuals and decent software all costs money. Yet if they can't afford to do a proper job and give customers value-for-money and quality products they shouldn't be in the Amiga market in the first place.

And besides, not spending money on packaging etc is a shortsighted view in the current Amiga climate. Not so long ago you could rely on store sales reps to sell your products for you, but these days are long gone. Nowadays sales people have got other things to worry about, and there is a vast range of other products that have to be sold as well as Amiga! Your product will have to sell itself, and the only way to do this is via decent packaging which will prompt customers to pick it up and look

at it – this is a basic premise of FMCG (Fast Moving Consumer Goods) and consumer goods marketing – packaging is one of the key ingredients in the marketing of the product.

Some companies don't realise this, which is one of the reasons why the larger Amiga developers have grown so big in the first place. GVP, Powis and others have treated packaging and manuals as key aspects rather than afterthoughts and in doing so have succeeded in getting their products recognised as quality peripherals and thus sold more

## BONE IDLE?

Perhaps another consideration is lack of commercial knowledge. After all the Amiga is a home computer, and a lot of those users go on to try and sell products they have created. Because they might not be experienced in marketing (they don't realise the importance of packaging and don't bother with it). Yet these people need only walk into a dealer showroom and look at the shelves to realise how important it really is.


No, unfortunately I suspect the reason, is laziness. There are several Amiga developers, I think not many in this country, who ship products in brown boxes because they can't be bothered with the hassle of creating colour packaging.

They can't be bothered! They're content to just do a product, flog it to a few users and earn a little money.

Personally I advise companies like this, if they're in business they should be there to win, to increase turnover and raise the bottom line – their profits. If they're not, why be in business in the first place? But what you should consider is that if a company can't be bothered to spend a little extra on packaging, what else in the product couldn't it be bothered with? Is the product, whatever it may be, really likely to any good if they can't be bothered?

## THE MORAL OF THE STORY

This lesson to be learned here is watch out for these products, they won't jump off the shelf at you, so you'll need to look for them. And when you've found them, check them very, very carefully before you spend your hard earned money.

Of course you may come across the odd gem in this sea of faceless products. It's often the case that innovative small developers who really know about engineering can't afford colourful packaging or don't understand marketing. For this reason always ask around, read the reviews and check with your friends but be wary of the dull brown box! And beware suppliers – the proverb don't judge a book by its cover doesn't apply here. Get it right and your product will do better. 



# I Dream a Web



~~Sunday April 8~~

Monday April 9

The clock keeps going round

It won't tell me the time

Santa Claus gave a gun to me

Let loose the puppies of War

I died last night



"...AWESOME...!"

"...BREATH TAKING...!"

"...HEART STOPPING...!"

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# UNIVERSE

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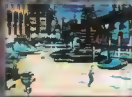
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# AMIGA

## KEYBOARD SHORTCUTS:

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## BRILLIANCE 2

### COLOUR MODES

KEY	EFFECT
F1	Colour
F2	Colour
F3	Colour
F4	Colour
F5	Colour
F6	Colour
F7	Colour
F8	Colour
F9	Colour
F10	Colour

## BRILLIANCE 2

### ANIMATION CONTROLS

KEY	EFFECT
F1	Colour
F2	Colour
F3	Colour
F4	Colour
F5	Colour
F6	Colour
F7	Colour
F8	Colour
F9	Colour
F10	Colour

## TOOL CONTROL

KEY	EFFECT
F1	Colour
F2	Colour
F3	Colour
F4	Colour
F5	Colour
F6	Colour
F7	Colour
F8	Colour
F9	Colour
F10	Colour

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### COLOUR MODES

KEY	EFFECT
F1	Colour
F2	Colour
F3	Colour
F4	Colour
F5	Colour
F6	Colour
F7	Colour
F8	Colour
F9	Colour
F10	Colour

## DPAIN'T 5

### ANIMATION CONTROLS

KEY	EFFECT
F1	Colour
F2	Colour
F3	Colour
F4	Colour
F5	Colour
F6	Colour
F7	Colour
F8	Colour
F9	Colour
F10	Colour

## MACROS

KEY	EFFECT
F1	Colour
F2	Colour
F3	Colour
F4	Colour
F5	Colour
F6	Colour
F7	Colour
F8	Colour
F9	Colour
F10	Colour

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